

Child Welfare Services New System Project

Feasibility Study Report

August 2012



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1	Executive Project Approval Submittal	1
2	Information Technology: Project Summary Package	5
3	Business Case	15
3.1	Business Program Background	15
3.1.1	Business Program	15
3.1.2	Current Business Process	20
3.1.2.1	Child Welfare Services/Case Management System (CWS/CMS)	21
3.1.3	Impact to Business Program/Process	22
3.1.4	Customers and Users of the Business Program/Process	23
3.1.5	Current Annual Costs for CWS/CMS	23
3.1.6	Estimated Annual Costs for CWS-NS	24
3.2	Business Problem or Opportunity	25
3.2.1	Operational Background	25
3.2.1.1	Analysis of the Functional Capabilities That Exist in CWS/CMS	26
3.2.1.2	Evaluation Results of Capabilities by Business Segment	27
3.2.1.3	Evaluation Results by Program Component to Business Function	28
3.2.2	Problem/Opportunity Assessment	31
3.2.2.1	SACWIS Compliance	31
3.2.2.2	Resource Utilization	33
3.2.2.3	System Access	34
3.2.2.4	Information Exchange Interfaces	35
3.2.2.5	Business Collaboration	36
3.2.2.6	Outcome-Driven Planning, Management and Assessment	37
3.3	Business Objectives/Benefits	38
3.3.1	Project Performance Indicators Evaluation Plan	46
3.4	Business Functional Requirements	49
4	Baseline Analysis	99
4.1	Current Method	99
4.2	Technical Environment	99
4.2.1	Existing Infrastructure	101
5	Proposed Solution	107
5.1	Solution Description	110
5.1.1	Hardware	111

5.1.2	Software	115
5.1.3	Technical platform	115
5.1.4	Development Approach	116
5.1.4.1	Purchased Product Configuration	116
5.1.4.2	Data Migration.....	116
5.1.4.3	Custom Service Development.....	117
5.1.4.4	Automated Testing.....	117
5.1.4.5	Development Lifecycle	117
5.1.5	Integration issues	120
5.1.6	Procurement Approach.....	121
5.1.6.1	Proposed Prime Vendor Procurement Vehicle(s).....	122
5.1.6.2	Proposed Prime Vendor Contract Type	127
5.1.6.3	Market Research.....	127
5.1.6.4	Government Code Section 19130 (b) Justification	128
5.1.6.5	Contracts Exempt from Government Code Section 19130 Contracts	133
5.1.6.6	Small Business and Certified Disabled Veteran Business Enterprise	133
5.1.7	Technical Interfaces	134
5.1.8	Accessibility	136
5.1.9	Testing Plan.....	136
5.1.9.1	Unit Test.....	137
5.1.9.2	Integration Testing	137
5.1.9.3	Informal Sandbox Testing	137
5.1.9.4	System Testing	137
5.1.9.5	User Acceptance Testing	138
5.1.9.6	Defect Identification, Management and Correction	138
5.1.9.7	Version Control	139
5.1.10	Resource Requirements.....	139
5.1.10.1	Project Staffing Approach.....	139
5.1.11	Training Plan	148
5.1.11.1	Sandbox Training	149
5.1.11.2	Formal User Focused Training.....	149
5.1.11.3	The Training Environment	150
5.1.12	On-going Maintenance	150

5.1.13	Information Security	151
5.1.13.1	Confidentiality.....	152
5.1.13.2	Data Encryption.....	152
5.1.13.3	Secure Connection.....	152
5.1.13.4	Two Factor Authentication.....	152
5.1.13.5	Federal Guide to Web Services Security.....	153
5.1.13.6	The CWS-NS Project Identity Management Key Points	154
5.1.13.7	Authentication and Authorization.....	154
5.1.13.8	The CWS-NS Authentication	155
5.1.13.9	Authentication Levels	156
5.1.13.10	Authorization	156
5.1.13.11	Identity Management.....	157
5.1.13.12	Management of Identities	157
5.1.13.13	Access Management.....	159
5.1.13.14	Single Sign-On (SSO)	159
5.1.13.15	Web SSO - Web Access Management / Web Single Sign On	159
5.1.13.16	Federated Sign On	159
5.1.13.17	Trust and Federation	160
5.1.14	Impact on End Users.....	160
5.1.15	Impact on Existing System.....	161
5.1.16	Consistency With Overall Strategies	161
5.1.17	Impact on Current Infrastructure.....	162
5.1.18	Impact on Data Center(s)	162
5.1.19	System Hosting/Data Center Consolidation	162
5.1.20	Backup and Operational Recovery.....	162
5.1.21	Public Access.....	163
5.1.22	Costs and Benefits	165
5.1.22.1	One-Time IT Costs	165
5.1.22.2	Continuing IT Project Costs.....	170
5.1.22.3	Continuing Existing Costs	171
5.2	Rationale for Selection	173
5.3	Other Alternatives Considered	176
5.3.1	Upgrade the Existing CWS/CMS	177

5.3.1.1	Technical Description.....	179
5.3.1.2	Costs.....	180
5.3.1.3	Benefits.....	180
5.3.1.4	Challenges.....	181
5.3.2	Restart the CWS/Web Project.....	185
5.3.2.1	Technical Description.....	187
5.3.2.2	Costs.....	187
5.3.2.3	Benefits.....	188
5.3.2.4	Challenges.....	188
5.3.3	Build a New Custom System.....	194
5.3.3.1	Technical Description.....	194
5.3.3.2	Costs.....	194
5.3.3.3	Benefits.....	195
5.3.3.4	Challenges.....	195
6	Project Management Plan.....	201
6.1	Project Organization.....	201
6.2	Project Plan.....	201
6.2.1	Project Phasing.....	202
6.2.2	Project Schedule.....	203
6.3	Authorization Required.....	203
7	Risk Management Plan.....	205
8	Economic Analysis Worksheets (EAWS).....	207

LIST OF APPENDICES

Report to the Legislature: Child Welfare Services Automation Study	Appendix A
CWS-NS Project Management Plan	Appendix B
CWS-NS Project Organization Chart	Appendix C
CWS-NS Project Roles and Responsibilities	Appendix D
CWS-NS Project Schedule	Appendix E
CWS-NS Risk Management Plan	Appendix F
CWS-NS Business Process Workflows/Use Cases	Appendix G
CWS-NS Technical Architecture Vision	Appendix H

CWS-NS Evaluation Framework	Appendix I
CWS-NS SIMM 20D – Questionnaire for Information Systems	Appendix J
CWS-NS Validation of Buy/Build Approach	Appendix K
CWS-CMS Governance Structure	Appendix L
Ten Year EAWs	Appendix M
OSI and CDSS FY 2013/14 Budget Change Proposal Workload Analysis.	Appendix N


LIST OF TABLES

Table 3-1 - Program Component to Business Function Mapping.....	18
Table 3-2 - Current Annual CWS/CMS Costs	23
Table 3-3 - Estimated Annual Continuing Costs.....	24
Table 3-4 – CWS/CMS Capabilities by Business Segments	27
Table 3-5 - Program Components with Missing/Needs Improvement Functionality	29
Table 3-6 – Business Objectives Analysis.....	44
Table 3-7 – Project Performance Indicators Evaluation Plan	46
Table 3-8 - SACWIS Requirements Matrix.....	50
Table 3-9 - Capabilities Matrix.....	54
Table 5-1 - SI Costs by Phase	121
Table 5-2 - Key Actions and Dates.....	126
Table 5-3- CWS-NS Contract Table.....	133
Table 5-4 - CWS-NS State Staffing by Project Phase	146
Table 5-5 – New System – Buy/Build Approach – Scorecard	173
Table 5-6 - Technical Solution to Identify Problem/Opportunity Elements.....	174
Table 5-7 - Comparison of One-Time Project Costs	176
Table 5-8 – CWS/CMS Upgrade – Scorecard.....	179
Table 5-9– CWS/CMS Upgrade – Initial System and Business Functionality	183
Table 5-10 – CWS/CMS Upgrade – Future System and Business Functionality	184
Table 5-11 – Restart CWS/Web – Scorecard.....	187
Table 5-12 – Restart CWS/Web – Initial System and Business Functionality	192
Table 5-13 – Restart CWS/Web – Future System and Business Functionality	192
Table 5-14 – New System – Custom Approach – Scorecard	194
Table 5-15 – New System – Custom Approach – Initial System and Business Functionality	198
Table 5-16 – New System – Custom Approach – Future System and Business Functionality	199
Table 6-1 - Project Phases and Deliverables Roles and Responsibilities	202

LIST OF FIGURES

Figure 1 - Business Process Model.....	21
Figure 2 - Current System Logical Topology	102
Figure 3 - Remote Access Logical Topology	104
Figure 4 - CWS-NS - Technical Environment.....	115
Figure 5 - Buy/Build Lifecycle Model	118
Figure 6 - SOA Support of the Development Lifecycle	120
Figure 7– Buy/Build Timeline	121
Figure 8 – Data Exchange Interface Staffing Model.....	130
Figure 9 - Federal Security Standards Model.....	153
Figure 10 - The CWS-NS Authorization Model.....	155
Figure 11 - The CWS-NS Identity Management Model	158
Figure 12 - Estimated One-Time CWS-NS Costs	165
Figure 13 - Continuing IT Project Costs	170
Figure 14 –Continuing Existing Costs	171
Figure 15 – CWS/CMS Upgrade – Technical Environment.....	178
Figure 16 – CWS/CMS Upgrade – Lifecycle Methodology.....	181
Figure 17 - CWS/CMS Upgrade – Procurement Duration	183
Figure 18 – CWS/CMS Upgrade – Timeline.....	184
Figure 19 – Restart CWS/Web – Technical Environment.....	186
Figure 20 – Restart CWS/Web – Lifecycle Methodology.....	189
Figure 21 - Restart CWS/Web – Procurement Duration.....	191
Figure 22 – Restart CWS/Web –Timeline	193
Figure 23 – New System – Custom Approach – Lifecycle Methodology	195
Figure 24 - New System – Custom Approach – Procurement Duration	198
Figure 25 – New System – Custom Approach – Timeline	199

1 Executive Project Approval Submittal

Information Technology Project Request			
Feasibility Study Report			
Executive Approval Transmittal			
Department Name			
California Department of Social Services			
Project Title (maximum of 75 characters)			
Child Welfare Services New System Project			
Project Acronym	Department Priority	Agency Priority	
CWS-NS	1	1	

I am submitting the attached Feasibility Study Report (FSR) pursuant to a Trailer Bill (SB 1041, Chapter 47, Statutes of 2012, Section 52 (a)) to the Budget Act of 2012 and in support of our request for the California Technology Agency's approval to undertake this project. I certify that the FSR was prepared in accordance with State Administrative Manual Sections 4920-4930.1 and that the proposed project is consistent with our information technology strategy as expressed in our current Agency Information Management Strategy (AIMS).

I have reviewed and agree with the information in the attached FSR.

I also certify that the acquisition of the applicable information technology (IT) product(s) or service(s) required by my department that are subject to Government Code 11135 applying Section 508 of the Rehabilitation Act of 1973 as amended meets the requirements or qualifies for one or more exceptions (see following page).

APPROVAL SIGNATURES		
CDSS Chief Information Officer		Date Signed
Printed name:	Kären Cagle	
CDSS Budget Officer		Date Signed
Printed name:	Brian Dougherty	
CDSS Department Director		Date Signed
Printed name:	Will Lightbourne	
OSI Chief Information Officer		Date Signed
Printed name:	Gretchen Hernandez	
OSI Budget Officer		Date Signed
Printed name:	Alicia Bugarin	
OSI Acting Director		Date Signed
Printed name:	Debbie Rose	
Agency Chief Information Officer		Date Signed
Printed name:	Shell Culp	
Agency Secretary		Date Signed
Printed name:	Diana S. Dooley	

IT Accessibility Certification

The following IT Accessibility Certification certifies that this project meets Government Code 11135 (Federal Section 508 of the Rehabilitation Act of 1973.)

Yes or No

Yes	The Proposed Project Meets Government Code 11135 / Section 508 Requirements and no exceptions apply.
-----	---

Exceptions Not Requiring Alternative Means of Access

Yes or No	Accessibility Exception Justification
No	The IT project meets the definition of a national security system.
No	The IT project will be located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment (i.e., “Back Office Exception.”)
No	The IT acquisition is acquired by a contractor incidental to a contract.

Exceptions Requiring Alternative Means of Access for Persons with Disabilities

Yes or No	Accessibility Exception Justification
No	Meeting the accessibility requirements would constitute an “undue burden” (i.e., a significant difficulty or expense considering all agency resources). Explain: N/A
No	No commercial solution is available to meet the requirements for the IT project that provides for accessibility. Explain: N/A

Exceptions Requiring Alternative Means of Access for Persons with Disabilities

Yes or No	Accessibility Exception Justification
No	No solution is available to meet the requirements for the IT project that does not require a fundamental alteration in the nature of the product or its components. Explain: N/A

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2 Information Technology: Project Summary Package

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

SECTION A: EXECUTIVE SUMMARY

1.	Submittal Date	
----	-----------------------	--

		FSR	SPR	PSP Only	Other:
2.	Type of Document	X			
	Project Number				

		Estimated Project Dates		
3.	Project Title	CWS New System Project	Start	End
	Project Acronym	CWS-NS	7/2013	9/2017

4.	Submitting Department	California Department of Social Services
5.	Reporting Agency	California Health and Human Services Agency

6.	Project Objectives
	<p>The CWS-NS project is focused on meeting technical and business objectives that will:</p> <ul style="list-style-type: none"> • Improve service delivery and outcomes • Allow more timely system enhancements to support changes in CWS practice • Achieve SACWIS compliance required to maintain Federal Financial Participation (FFP) funding and avoid federal non-compliance penalties • Reduce ongoing maintenance and operations costs <p>The technical and business objectives that will facilitate the above are:</p> <p>Technical Objectives:</p> <ul style="list-style-type: none"> • Replace the highly-distributed legacy CWS/CMS with a

8.	Major Milestones	Est. Complete Date
	Submit 2013 PAPDU-CWS FSR to ACF	10/1/2012
	Recruit and Hire State Staff for the Planning and Procurement Phase Completed	9/30/2013
	Organizational Change Management Initiated	10/15/2013
	Development of Project Management Plans, Processes and Procedures Completed	12/31/2013
	Development of the RFP Completed	5/27/2014
	RFP Released	7/9/2014
	Intent to Bid Due	7.21/2014
	Submit IAPD to ACF	5/28/2015

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

SECTION A: EXECUTIVE SUMMARY

- centralized, web-based SOA computing infrastructure
- Replace the proprietary CWS/CMS software with Commercial-Off-The-Shelf (COTS) software that meets the majority of the business practice needs
- Develop custom software services to close any operational gaps in the COTS software capabilities

Business objectives:

- **SACWIS Compliance:** to ensure retention of Federal Funding Participation (FFP) at current or improved participation levels
- **Resource Utilization:** through elimination of redundant data entry, increased availability of information and documentation, and timely business practice execution
- **System Access:** Improved CWS worker, Service Provider and Service Organization access to system information through portal and mobility technologies
- **Information Exchange Interfaces:** Improved access, accuracy and completeness of data resident in external State/County and business partner repositories
- **Business Collaboration:** Improved communication/collaboration and information management between CWS workers, community organizations, service providers and multi-disciplinary teams.
- **Outcome-Driven Planning, Management and Assessment:** Improved case management outcome/process planning, management and assessment/ reporting.

Draft Proposal Due	11/17/2014
Final Proposal Due	3/6/2015
Contract Award	7/8/2015
Execute Contract	7/8/2015
Data Conversion Initiated	7/16/15
Computing Infrastructure Established	9/15/2015
DD&I Phase 1 Custom Software Services Completed	6/17/2016
DD&I Phase 2 Custom Software Service Development Initiated	6/20/2016
DD&I Phase 1 Core Software Services Completed	6/17/2016
DD&I Phase 1 Training Completed	8/19/2016
DD&I Phase 1 Testing Completed	7/19/2016
DD&I Phase 1 Deployment Completed	9/19/2016
Decommission CWS/CMS	10/19/2016
DD&I Phase 2 Software Services Development Completed	6/22/2017
DD&I Phase 2 Testing Completed	7/24/2017
DD&I Phase 2 Training Completed	8/24/2017
DD&I Phase 2 Deployment Completed	8/25/2017
Project Closure Completed	10/6/2017
PIER Completed	6/2019
Key Deliverables	
Project Management Plans, Processes and Procedures	12/31/13

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

SECTION A: EXECUTIVE SUMMARY

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2013 PAPDU & CWS FSR	10/1/2012
2013-14 BCP	9/4/2012
IAPD	5/28/2015
RFP Baseline Document	7/9/2014
Final Proposals	3/6/2015
Contract Award	7/8/2015
DD&I Phase 1 Custom Software Services Baseline	6/17/2016
DD&I Phase 1 Core Components Baseline	6/17/2016
DD&I Phase 1 Training Report	8/19/2016
DD&I Phase 1 Test Report	7/19/2016
DD&I Phase 1 Deployment	9/19/2016
DD&I Phase 2 Custom Software Services Baseline	6/22/2017
DD&I Phase 2 Test Report	7/24/2017
DD&I Phase 2 Training Report	8/24/2017
DD&I Phase 2 Deployment	8/25/2017
Project Closure Report	10/6/2017

7.	Proposed Solution
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INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

SECTION A: EXECUTIVE SUMMARY

The proposed solution is to replace Child Welfare Services/Case Management System (CWS/CMS) with a new computing infrastructure and a new software system – A Buy/Build product-delivery. This solution is recommended as it will deliver a new computing infrastructure, based on a Service-Oriented Architecture (SOA) and a new software-based system. It will optimize deployment of the counties' current and emerging business needs and will facilitate effective delivery of CWS services. It provides a solution which best meets current and future needs and fully incorporates all the required federal SACWIS requirements. It will provide significant benefits to children, their families, and communities as CWS workers become equipped to more effectively perform their jobs now and in the future. This alternative represents the shortest duration to deliver business value and has the most favorable impact to users. The technology supports effective, efficient, and economical upgrades as necessary throughout its lifetime. The proposed solution will also meet federal Statewide Automated Child Welfare Information System (SACWIS) requirements and allow California to retain FFP.

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

SECTION B: PROJECT CONTACTS

Executive Contacts							
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INFORMATION TECHNOLOGY PROJECT SUMMARY
SECTION C: PROJECT RELEVANCE TO STATE AND/OR DEPARTMENTAL PLANS

1.	What is the date of your current Operational Recovery Plan (ORP)?	Date	7/2011		Project #	
2.	What is the date of your current Agency Information Management Strategy (AIMS)?	Date	8/2011 (Updated 11/2011)		Doc. Type	FSR
3.	For the proposed project, provide the page reference in your current AIMS and/or strategic business plan.	Doc.	AIMS			
		Page #	44			

	Yes	No
4. Is the project reportable to control agencies?	X	

If YES, CHECK all that apply:	
X	a) The estimated total development and acquisition cost exceeds the departmental cost threshold
X	b) A new system development or acquisition that is specifically required by legislative mandate or is subject to special legislative review as specified in budget control language or other legislation.
X	c) The project involves a budget action.
	d) The project meets a condition previously imposed by the Technology Agency.

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

SECTION D: BUDGET INFORMATION

Project #	
Doc. Type	FSR

Budget Augmentation Required?	No	
	Yes	X
If YES, indicate fiscal year(s) and associated amount:		

FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	TOTAL
7,286,623	30,633,981	125,538,669	118,917,726	73,678,043	23,869,434	379,924,476

PROJECT COSTS

Fiscal Year	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	TOTAL
One-Time Cost	10,302,046	33,649,404	128,554,092	121,933,149	56,653,040	0	351,091,731
Continuing Costs	0	0	0	0	17,778,859	23,869,434	41,648,293
TOTAL PROJECT BUDGET	10,302,046	33,649,404	128,554,092	121,933,149	74,431,899	23,869,434	392,740,024

PROJECT FINANCIAL BENEFITS

	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	TOTAL
Cost Savings/Avoidances	(10,302,046)	(33,649,404)	(128,554,092)	(121,933,149)	8,806,930	60,293,151	(225,338,610)
Revenue Increase	0	0	0	0	0	0	0

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

SECTION D: BUDGET INFORMATION

Vendor Cost for FSR Development (if applicable)	Not Applicable
Vendor Name	

Project #	
Doc. Type	FSR

VENDOR PROJECT BUDGET

1.	Fiscal Year	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	TOTAL
2.	Primary Vendor Budget			49,462,576	20,448,161	9,625,790	5,860,000	5,860,000	5,860,000	5,860,000	5,860,000	108,836,528
3.	Independent Oversight Budget	127,842	127,842	127,842	127,842	31,961	-	-	-	-	-	543,330
4.	IV&V Budget	317,520	425,376	788,256	788,256	52,416	-	-	-	-	-	2,371,824
5.	Other Budget	4,260,996	5,569,504	10,305,929	14,710,731	8,416,823	1,091,544	1,091,544	1,091,544	1,091,544	1,091,544	48,721,701
6.	TOTAL VENDOR BUDGET	4,706,358	6,122,722	60,684,604	36,074,991	18,126,989	6,951,544	6,951,544	6,951,544	6,951,544	6,951,544	160,473,382

----- (Applies to SPR only) -----

PRIMARY VENDOR HISTORY SPECIFIC TO THIS PROJECT

•	Primary Vendor	
•	Contract Start Date	
•	Contract End Date (projected)	
•	Amount	\$

PRIMARY VENDOR CONTACTS

	Vendor	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail
1.									

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

SECTION F: RISK ASSESSMENT INFORMATION

RISK ASSESSMENT

Project #	
Doc. Type	FSR

	Yes	No
Has a Risk Management Plan been developed for this project?	X	

General Comment(s)

Refer to Appendix F - Risk Management Plan.

3 Business Case

3.1 Business Program Background

3.1.1 Business Program

The Child Welfare Services (CWS) program is the primary prevention and intervention resource for child abuse and neglect in California. Annually, California child welfare workers investigate approximately 475,000 reports of severe injury, death, and life threatening neglect to children at the hands of parents and family members. As a result of these investigations, an average of 100,000 children per year are either in foster care for their protection or live with their parents under close county protective supervision.

To improve the ability of the family unit to safely care for these supervised children, family members annually receive services designed to prevent abuse and neglect. In addition to providing services to the child and family, the CWS workers must complete the assessment and monitoring of the family members and relatives, in conjunction with the 100,000 active children. When the organizations and individuals that provide services (such as medical, educational, psychological) are added to the number of children, the members of the family unit/participating relatives, and the population of service organizations/service providers, the CWS workers are responsible for a population between 500,000 and 750,000 individuals that must be documented, assessed and monitored through the system on an ongoing basis.

California is dedicated to providing a continuum of programs and services aimed at safeguarding the well-being of children and families in ways that strengthen and preserve families, encourage personal responsibility, and foster independence.

The “business” of child welfare is protecting the most vulnerable of California’s residents who are frequently raised in poverty and have experienced tremendous trauma in their short lives. Child protection work does not occur in an office at a desk but in the community, homes, schools, hospitals, foster homes, and community centers.

The overall objective of the CWS program is that every child in California lives in a safe, stable, permanent home, nurtured by healthy families and strong communities. California’s CWS program focuses on:

- Investigating and assessing allegations of child abuse or neglect.
- Initiating, completing, updating, and supporting the judicial processes and procedures related to the removal of children from and return to their parents, placement in foster care, and adoption of children.
- Maintaining children safely in their family’s home, whenever possible and appropriate.
- Providing children with permanency and stability in their living situations.
- Preserving the continuity of family relationships and connections between siblings.

- Enhancing families' capacity to provide for their children's needs.
- Ensuring children receive appropriate services to meet their educational, physical and mental needs.
- Preparing youth to transition from foster care into adulthood.
- Promoting adoption and alternative permanent placement for children unable to return to their own home or extended family.

The following major components comprise the CWS program:

Prevention: Service delivery and family engagement processes designed to mitigate the circumstances leading to child maltreatment before it occurs or necessitates the removal of the child.

Emergency Response: A system providing in-person response (24 hours a day) to reports of abuse, neglect, or exploitation of children for the purpose of investigation, and to determine the necessity for providing initial intake services and crisis intervention to maintain the child safely in his/her own home. To protect the safety of the child it may be necessary to remove the child from the home.

Family Maintenance: Time-limited services that are designed to provide in-home protective services to prevent or remedy neglect, abuse or exploitation for the purpose of preventing the separation of children from their families.

Family Preservation: Intensive services for families whose children, without such services, would be subject to risk of out-of-home placement, remain in existing out-of-home placements for longer periods of time, or are placed in a more restrictive out-of-home placement.

Family Reunification: Time-limited services to children in out-of-home care to prevent or remedy neglect, abuse, or exploitation when the child cannot remain safely at home and is placed out-of-home while services are provided to reunite the family.

Concurrent Planning: Concurrent planning is an approach that seeks to eliminate delays in attaining permanent family placements for children. This process involves considering all reasonable options for permanency at the earliest possible point following a child's entry into out-of-home care services. This includes identifying an appropriate caregiver interested in the order of adoption, legal guardianship or long term placement in the event that the child may not reunify with the biological parents.

Placement: Services designed to serve and protect those children who cannot remain in their homes. Current placement options include family homes (relatives or foster family homes), certified homes of foster family agencies and group homes. Foster care maintenance also includes payments to cover the cost of providing food, clothing, shelter, daily supervision, school supplies, a child's personal incidentals and reasonable travel, including travel

to location of services (e.g., therapy, court, health appointments) and to the child's home for visitation.

Permanent Placement: Alternative family structures for children who, because of abuse, neglect, or exploitation cannot remain safely at home, and/or who are unlikely ever to return home. Permanency placement services are provided when a decision has been made for a permanent plan for adoption, legal guardianship (including the Kinship Guardianship Assistance Payment Program [KinGap]), independent living arrangement for adolescent children, or long term placement has been ordered.

Adoption Services: Services are the provision of a permanent plan for a child involving the study of adoptive families and approving and placing children with them. These services may include recruitment of potential adoptive parents; financial assistance to adoptive parents to assist in the support of special needs children; and direct relinquishment and independent adoption.

Independent Living: Education and services for foster youth based on an assessment of needs and designed to help youth transition successfully from foster care to living independently. Services are provided to enhance basic living skills (e.g., employment, set up bank account, transitional housing), as well as career development skills.

Emancipated Foster Youth Services: Extending foster care until the age of 21; increasing support for kinship care (opportunities for youth to live with family members); improving education stability; coordinating health care services; providing direct child welfare support to Native American tribes; and expanding resources to train caregivers, child welfare staff, attorneys, and others.

Probation Department Child Welfare Roles and Responsibilities

California has chosen the option of using federal Title IV-E (Foster Care) funds to pay for out of home care for children who qualify for these funds and are under the supervision of county probation departments. Pursuant to IV-E requirements, county probation departments are responsible for complying with the same requirements (e.g., eligibility, provision of services, as well as tracking, managing, and reporting services) as county child welfare agencies. CWS/CMS is currently used by probation departments to meet those responsibilities. Any missing or incomplete system functionality impacting child welfare agencies is also impacting probation departments, including their ability to meet eligibility, services, and program management responsibilities. Consequently, references in this Feasibility Study Report (FSR) related to child welfare workers include probation officers and staff who supervise children qualifying for IV-E funds.

Understanding the dependencies that exist between the functional elements of the business practice and the components that define the program is critical to identification of the business problem or opportunity scope.

The following table shows where each program component intersects with each business practice function to achieve its goal(s). Later in this FSR, Table 3.5 – Program Components with Missing/Needs Improvement Functionality will show that the Business Segment/Business Function elements of this table align with the Statewide Automated Child Welfare Information System (SACWIS) requirement guidelines. Note that most individual business practice functionalities touch the majority of the program components. While the execution of an individual business function may be slightly different at each program component (i.e., data entry at one point, search/view at another, etc.), there are no business functions that only intersect with one program component. This reuse complexity becomes important in development of the problem and opportunity discussion when missing or inadequate capabilities are identified in the system, and critical in the final design/delivery of the system services.

Table 3-1 - Program Component to Business Function Mapping

Business Segment	Business Function	Program Components										
		Prevention	Emergency Response	Family Maintenance	Family Preservation	Family Reunification	Concurrent Planning	Placement	Permanent Placement	Adoption Services	Independent Living	Emancipated Foster Youth Services
Intake	Intake	X	X	X	X	X	X	X	X	X	X	X
	Screening	X	X	X	X	X	X	X	X	X	X	X
	Investigation	X	X	X	X	X	X	X	X	X	X	X
	Assessment	X	X	X	X	X	X	X	X	X	X	X
	State Practice	X	X	X	X	X	X	X	X	X	X	X
Case Management	Service/Case Plan	X	X	X	X	X	X	X	X	X	X	X
	Case Review/Evaluation	X	X	X	X	X	X	X	X	X	X	X
	Facilities Support	X	X	X	X	X	X	X	X	X	X	X
	Monitoring Service/Case	X	X	X	X	X	X	X	X	X	X	X

Business Segment	Business Function	Program Components										
		Prevention	Emergency Response	Family Maintenance	Family Preservation	Family Reunification	Concurrent Planning	Placement	Permanent Placement	Adoption Services	Independent Living	Emancipated Foster Youth Services
	Plan Services											
Resource Management	Facilities Support		X			X	X	X	X	X	X	X
	Foster/ Adoptive Homes Support		X			X	X	X	X	X	X	X
	Resource Directory	X	X	X	X	X	X	X	X	X	X	X
	Contract Support	X	X	X	X	X	X	X	X	X	X	X
Court Processing	Court Documents	X	X	X	X	X	X	X	X	X	X	X
	Notifications	X	X	X	X	X	X	X	X	X	X	X
	Tracking	X	X	X	X	X	X	X	X	X	X	X
	Indian Child Welfare Act	X	X	X	X	X	X	X	X	X	X	X
Eligibility	Initial Eligibility Determination		X	X	X	X		X	X	X	X	X
	Changes in Eligibility		X	X	X	X	X	X	X	X	X	X
Financial Management	Accounts Payable	X	X	X	X	X	X	X	X	X	X	X
	Accounts Receivable	X	X	X	X	X	X	X	X	X	X	X
	Claims	X	X	X	X	X	X	X	X	X	X	X
Administration	Staff Management	X	X	X	X	X	X	X	X	X	X	X
	Reporting	X	X	X	X	X	X	X	X	X	X	X
	Administrative Support	X	X	X	X	X	X	X	X	X	X	X

Business Segment	Business Function	Program Components										
		Prevention	Emergency Response	Family Maintenance	Family Preservation	Family Reunification	Concurrent Planning	Placement	Permanent Placement	Adoption Services	Independent Living	Emancipated Foster Youth Services
Interfaces	Required Interfaces	X	X	X	X	X	X	X	X	X	X	X
	Optional Interfaces	X	X	X	X	X	X	X	X	X	X	X
Quality Assurance	Quality Assurance	X	X	X	X	X	X	X	X	X	X	X
Additional Functionality	Additional Functionality	X	X	X	X	X	X	X	X	X	X	X

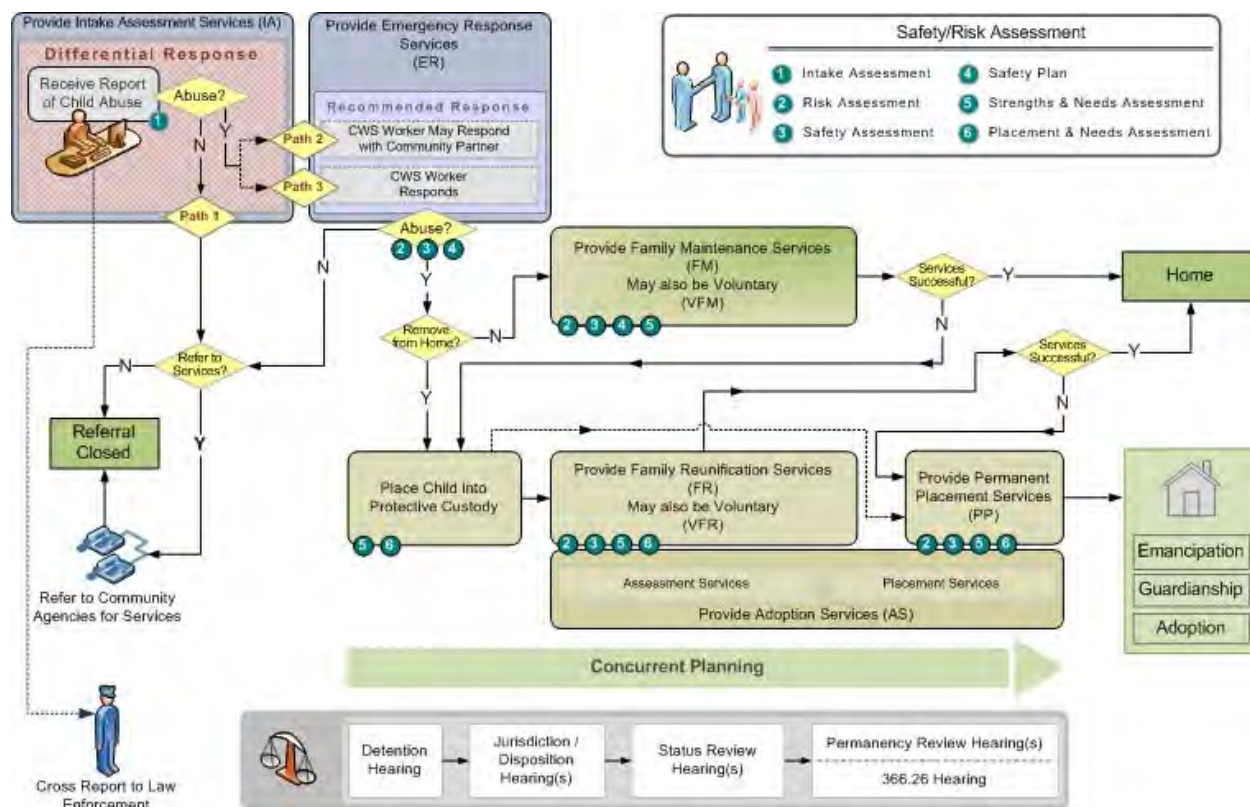
3.1.2 Current Business Process

County welfare agencies administer the child welfare services program under federal and state statutes and regulations. Their primary responsibilities, either directly or through providers, are to provide services to address child abuse and neglect, with the goals of improving child safety. This is accomplished utilizing four service components, which were established through State legislation (Senate Bill [SB] 14) enacted in 1982 as a result of federal requirements under Public Law 96-272. The four service components include:

- Emergency Response (ER)
- Family Maintenance (FM)
- Family Reunification (FR)
- Permanent Placement (PP) (includes Adoptions)

Like the interdependency that was illustrated between the functional elements of the business practice and the components that define the program, the following high level business process model illustrates the interdependencies that exist between these four service components and elements of the Safety/Risk Assessment process. The interdependency between practice and process directly impacts the definition of problem/opportunity addressed in the next section.

Figure 1 - Business Process Model



The above business process is currently supported by the CWS/CMS system. The use of automation to support the Business Program has provided benefits and challenges to the program and the user population tasked with implementing the program. Introduction of the current system at this point is intended only to complete the scope of the program background information.

3.1.2.1 Child Welfare Services/Case Management System (CWS/CMS)

CWS/CMS was conceived in 1989 via SB 370 (Chapter 1294, Statutes of 1989) which authorized the development and implementation of a statewide computer system to automate the case management, services planning, and information gathering functions of child welfare services. At the federal level, Public Law 103-66, H.R. 2264, the Omnibus Budget Reconciliation Act of 1993, established funding and functionality requirements for SACWIS. CWS/CMS is California's version of the federal SACWIS, which began implementation in 1997 with continued development through roll out in 1998. The system supports all 58 California counties and the California Department of Social Services (CDSS) and has over 22,500 users. The current system is in Maintenance & Operations (M&O). CWS workers throughout the State rely on CWS/CMS for access to child, family and other case-related information to make timely decisions, perform effective case management, and ultimately keep children safe and families intact. In addition, the system provides the State and county CWS agencies

with a common database, and consolidates the collection and reporting of information for CWS programs per State and federal requirements.

While the current implementation incorporated many of the federal SACWIS requirements, there are several areas of SACWIS functionality that have not been fulfilled, specifically:

- Adoption case management
- Interfaces for Title IV-A (California Work Opportunities and Responsibility to Kids [CalWORKS]), Title IV-D (Child Support), Title IV-E (Foster Care), and Title XIX (Medi-Cal) systems
- Automated foster care eligibility determination
- Financial management
- Archiving and purging of data
- Federal reporting

3.1.3 Impact to Business Program/Process

The Child Welfare Services Program is a combination of services, legal, medical, social work, case management, financial, educational, documentation, investigation and data reporting tasks each of which have multiple complex processes and procedures. Inherent in these processes and procedures is the need to collect, review, and access large amounts of information and data. Consequently, automation is a critical factor in making the program as efficient, effective, and economical as possible.

In addition, the program has a very high level of public and political concern and activity. As a result, the statutory, regulatory, and practice program requirements evolve very rapidly. As an example, during the last three years the State legislature has introduced 236 separate pieces of legislation to make CWS program changes. Eighty-six of these Bills, the majority containing multiple program revision in each Bill, have been signed into law. In addition to the State level, multiple changes to requirements and processes occur due to federal mandates, court decisions, and unique county program needs pursuant to county authority under California's state-supervised county-administered service delivery model. Virtually all of these revisions require changes, updates, or improvements in the capability and functionality of automated systems to ensure efficient and effective implementation and operation of evolving program mandates.

While program changes and the resulting tasks associated with them have increased significantly, overall funding for child welfare services has been declining over the past three years and has leveled out at a reduced level over the past three years. While new program administrative and services requirements seem to correlate with either slightly declining or steady foster care caseload, the reality is that fewer staff is responsible for more tasks and services per case. Recent federal and state legislation (Assembly Bill [AB] 12) implemented in January 2012 that extends foster care eligibility and services from age 18 to age 21 will further exacerbate this problem by potentially increasing staff caseloads. Consequently, there is an increasing need to replace the current system

with the recommended solution to fully implement, comply with, and realize the benefits of continual program changes. The new solution will automate existing manual tasks, decommission 50 plus external systems in the counties, provide CWS workers the capability and flexibility needed to effectively perform their ever increasing duties, and to provide improved service delivery to the children and families in need.

3.1.4 Customers and Users of the Business Program/Process

The CDSS, Children and Family Services Division (CFSD) provides leadership and oversight of County Child Welfare and Probation departments and community agencies in the implementation of CWS programs through regulations, training, technical assistance, incentives and program evaluations. CFSD is responsible for providing overall program management and setting program objectives for the entire State. CFSD is also responsible for working closely with the County Welfare Directors Association (CWDA), CWS/CMS Program Impact Advisory Committee (PIAC), CWS/CMS Technical Advisory Committee (TAC), CWS/CMS Oversight Committee (OSC), County Probation representatives and other key stakeholders on an ongoing basis to further improve the delivery of child welfare services to California's at risk children and families.

The CFSD Deputy Director leads this program and is the sponsor of the Child Welfare Services New System (CWS-NS) Project. The Deputy Director also has the authority to make investment costs vs. business value decisions for the business area.

3.1.5 Current Annual Costs for CWS/CMS

The current annual IT costs for the existing CWS/CMS system average \$79.8 million. These costs fund 49.5 state PYs, associated Operating Expense & Equipment, Contract services, data center services, and agency facilities. Assuming an approved FFP of 50 percent, the approximate annual State General Fund (SGF) cost IT costs for the existing CWS/CMS system averages \$39.9 million.

Table 3-2 - Current Annual CWS/CMS Costs

	FY 2013/14	
	PYs	Amts
Continuing Information		
Technology Costs		
Staff (salaries & benefits)	49.5	4,665,953
Hardware Lease/Maintenance		1,442,880
Software Maintenance/Licenses		2,586,908
Contract Services		33,327,048
Data Center Services		35,986,634
Agency Facilities		0
Other		1,839,031
Total IT Costs	49.5	79,848,454

3.1.6 Estimated Annual Costs for CWS-NS

The proposed solution's annual Continuing Costs are estimated to be \$23.9 million in SFY 2018/19 full implementation (beginning FY 2018-19). These costs fund 40.0 state PYs, associated Operating Expense & Equipment, Contract services, data center services, and agency facilities. With approved FFP of 50 percent the approximate annual State General Fund (SGF) Continuing IT costs are estimated to be approximately \$12 million annually. This equates to a SGF savings of roughly \$28 million per year compared to maintaining the existing system. The table below depicts the FY Continuing annual Costs breakdown.

Table 3-3 - Estimated Annual Continuing Costs

	FY 2018/19	
	PYs	Amts
Continuing IT Project Costs		
Staff (Salaries & Benefits)	40.0	4,517,960
Hardware Lease/Maintenance		744,000
Software Maintenance/Licenses		8,116,175
Telecommunications		0
Contract Services		6,951,544
Data Center Services		746,360
Agency Facilities		343,140
Other		2,450,255
Total Continuing IT Costs	40.0	23,869,434

3.2 Business Problem or Opportunity

3.2.1 Operational Background

The current system was designed in the early 1990s to meet the California child welfare services business needs and practices at that time. In addition, several federally mandated functionalities critical to program operations were never implemented. Since the CWS/CMS was implemented in 1997, professional practice, law, regulation, business processes, and program needs have changed significantly. These changes have set in motion policy shifts; practice improvements; alignment of partners, systems and communities; and new accountability structures to ensure the protection and the realization of a safe and stable home for all children.

CDSS and the Office of Systems Integration (OSI) have been unable to achieve implementation of all federal mandates and many of the changes in the CWS/CMS required to keep pace with State and federal laws that change practice and requirements. CWS/CMS does not support current CWS practice; does not provide an environment that supports innovation and new practices; and is not an economical, efficient, and effective automated tool for child welfare management and staff.

While practice has continued to evolve as a result of innovations and changing service needs for children, youth and families, increased productivity demands and statutory responsibilities have added to the inability of the current system to keep pace. Availability of improved technology would provide CWS workers with more time and better resources to effectively deliver services to families and children.

CWS/CMS continues to be non-compliant with federal SACWIS requirements even though Administration for Children and Families (ACF) still provides our Federal Financial Participation at the 50 percent level. Continued failure to comply, however, can potentially increase General Fund (GF) costs by 70 percent. ACF did temporarily reduce FFP due to non-compliance by California in the early 2000s and has done so in multiple other States. Reduction of FFP to the non-SACWIS level will increase the GF obligation from 50 to 85 percent of the total cost required to maintain and operate the current system. In dollar terms, the GF obligation will increase by \$28 million from \$40 million to \$68 million per year. Non-compliance will also result in a payback of prior FFP funding (i.e. potentially in the hundreds of millions of dollars) dating to the early 1990s. The total payback would be negotiated; however, the most recent informal federal guidance on the amount would include at least 25 percent of the FFP for CWS/Web and a potentially significant portion of the FFP received for CWS/CMS over the years.

Reduction in on-going FFP to a non-SACWIS rate also applies to county goods and services of the total costs. It would result in a significant reduction in the total amount of funding available for county costs to operate child welfare services information technology. Impacts on the State and counties are likely to be:

- Inability to operate or significant reduction in functionality of the CWS/CMS.
- Further reduction in ability to implement statutory and regulatory changes in the current system.

- System failures at the county level due to inability to replace and maintain old equipment.
- Increase State and/or county share of costs to operate and update the current system.
- Increased costs to both the State and the counties to develop and maintain external systems necessary to provide automation functionalities for child welfare services.

In addition, it is likely that any payback of prior FFP would be recouped by the federal government via reductions in State/county FFP claims for the entire federal IV-E (foster care) program. Depending on the negotiated amount of the payback, this method could create a significant funding loss for the foster care program for some unknown number of fiscal years.

In response to these issues, the Legislature took action to begin to pursue replacement of the CWS/CMS in the 2012 Budget Act and Trailer Bill (SB 1041, Chapter 47, Statutes of 2012, Section 52(a)) as follows:

Section 52 (a) The State Department of Social Services shall use funding included in the Budget Act of 2012 related to the replacement of the Child Welfare Services/Case Management System (CWS/CMS) for the next steps necessary to move forward with the recommendation of the Child Welfare Automation Study Team (CAST) to proceed toward procuring a new system, consistent with a buy/build strategy, as described in the CAST report submitted to the Legislature. These next steps shall include, but shall not be limited to, completing, in consultation with the counties and the County Welfare Directors Association, a Feasibility Study Report (FSR) and federal Advance Planning Document (APD), as well as conducting other planning activities. The Office of Systems Integration (OSI) and the department shall report the results of these activities, in addition to the key milestones and anticipated timelines for any resulting procurement process, to the Legislature by March 1, 2013, for review during budget hearings in 2013.

3.2.1.1 Analysis of the Functional Capabilities That Exist in CWS/CMS

At the heart of the analysis was the Child Welfare Services (CWS) Capabilities Matrix. This matrix was based on functional requirements provided in the SACWIS framework, State law, CWS practice, CWS Use Case scenarios, and CWS Business Process Workflow models. The CWS Capabilities Matrix was designed to reflect a hierarchical relationship between Business Segment, Function, Use Case, and Capability.

Each Business Segment/Function/Use Case hierarchical element was evaluated to identify which capabilities (software services) were provided by CWS/CMS, and which ones would require development of a custom software service. A capability is a business process or workflow activity that is performed by a user to support the business practice (i.e., Record Referral information, validate postal service address).

Capabilities that CWS/CMS partially met were considered fully met based on the evaluation approach.

Using this format and these boundary conditions, the CWS Automation Study Team in collaboration with CWS/CMS support staff, CWS county consultants, and County Welfare Directors Association representatives evaluated the capabilities provided by CWS/CMS. These evaluators used the CWS Capabilities Matrix as a data collection instrument to annotate results from their analysis. Capabilities determined to be partially met by CWS/CMS were counted as capabilities provided by the existing system. The following documentation was used as part of the evaluation:

- Report to the Legislature: Child Welfare Services Automation Study – Section IV: Status of CWS/CMS.
- Report to the Legislature: Child Welfare Services Automation Study - Appendix A: Critical Functionality Assessment and Methodology
- CWS Use Cases.
- CWS Business Process Flows.
- CWS/CMS Scenario Manager.

3.2.1.2 Evaluation Results of Capabilities by Business Segment

The current CWS/CMS can meet 24 percent of the 1,120 total capabilities identified in the CWS Capabilities Matrix. The following table provides the number and percent of capabilities that exist in CWS/CMS as well as those that require the development of custom services. The current system does not provide any capabilities for Financial Management or Quality Assurance. The capabilities provided by Eligibility and Additional Functionality are almost non-existent. The exceptionally high voids in these business segments weigh heavily on the overall operational functionality of the CWS/CMS, and continue to be roadblocks to SACWIS compliance.

The most critical business segments for the CWS practice are Case Management and Court Processing, where the average capability provided by CWS/CMS is at 32 percent.

Table 3-4 – CWS/CMS Capabilities by Business Segments

CWS/CMS Business Segments	Total Capabilities	CWS/CMS	Custom Services	% CWS/CMS	% Custom Services
CWS/CMS Total	1,120	265	855	24%	76%
Additional Functionality	117	11	106	9%	91%
Administration	57	22	35	39%	61%
Case Management	526	168	358	32%	68%
Court	50	16	34	32%	68%

CWS/CMS Business Segments	Total Capabilities	CWS/CMS	Custom Services	% CWS/CMS	% Custom Services
Processing					
Eligibility	135	2	133	1%	99%
Financial Management	59	0	59	0%	100%
Intake	119	29	90	24%	76%
Quality Assurance	17	0	17	0%	100%
Resource Management	40	17	23	43%	58%

Note: Resource Management percentages do not equal 100 percent due to rounding

Based on the evaluation approach, it was determined that CWS/CMS is not compliant with State/county operational needs, federal and state laws, regulations, and policies, or federal SACWIS requirements. The functional capability gaps in CWS/CMS has forced the CWS program to use redundant and/or manual processes and develop/maintain more than 100 external systems to fill the gaps and comply with laws, regulations and court orders. Because CWS/CMS only provides 24 percent of the functionality required by the business practice, it is imperative that a new solution be developed and implemented to meet the business practice goals and objectives and eliminate the need for additional external systems and manual workarounds.

3.2.1.3 Evaluation Results by Program Component to Business Function

The following table illustrates where Program Component and Business Functionality intersections in the current system either are missing functional support or the existing functional support needs to be improved to support program needs, goals and expectations. The missing functionality is especially important because it highlights three large missing SACWIS requirements: Eligibility, Financial Management, and Interfaces. The fourth major missing SACWIS component, Adoptions, is embedded within Case Management. Note that all business functions within Case Management currently need improvement including the limited Adoptions capability. Overall, this illustrates that the current system does not effectively support the business practice.

Table 3-5 - Program Components with Missing/Needs Improvement Functionality

Legend:		
No "X" – indicates no Program Component identified for the Business Segment/ Business Function		
"X" – indicates Program Component identified is dependent on Business Segment/Function to achieve their goal(s).		
X-Program Component with no changes	X-Program Component Missing Functionality	X- Program Component – Needs Improvement

Business Segment	Business Function	Program Components with Missing/Needs Improvement Functionality										
		Prevention	Emergency Response	Family Maintenance	Family Preservation	Family Reunification	Concurrent Planning	Placement	Permanent Placement	Adoption Services	Independent Living	Emancipated Foster Youth Services
Intake	Intake	X	X	X	X	X	X	X	X	X	X	X
	Screening	X	X	X	X	X	X	X	X	X	X	X
	Investigation	X	X	X	X	X	X	X	X	X	X	X
	Assessment	X	X	X	X	X	X	X	X	X	X	X
	State Practice	X	X	X	X	X	X	X	X	X	X	X
Case Management	Service/ Case Plan	X	X	X	X	X	X	X	X	X	X	X
	Case Review/ Evaluation	X	X	X	X	X	X	X	X	X	X	X
	Facilities Support	X	X	X	X	X	X	X	X	X	X	X
	Monitoring Service/Case Plan Services	X	X	X	X	X	X	X	X	X	X	X
Resource Management	Facilities Support		X			X	X	X	X	X	X	X
	Foster/ Adoptive Homes Support		X			X	X	X	X	X	X	X
	Resource Directory	X	X	X	X	X	X	X	X	X	X	X

Business Segment	Business Function	Program Components with Missing/Needs Improvement Functionality										
		Prevention	Emergency Response	Family Maintenance	Family Preservation	Family Reunification	Concurrent Planning	Placement	Permanent Placement	Adoption Services	Independent Living	Emancipated Foster Youth Services
	Contract Support	X	X	X	X	X	X	X	X	X	X	X
Court Processing	Court Documents	X	X	X	X	X	X	X	X	X	X	X
	Notifications	X	X	X	X	X	X	X	X	X	X	X
	Tracking	X	X	X	X	X	X	X	X	X	X	X
	Indian Child Welfare Act	X	X	X	X	X	X	X	X	X	X	X
Eligibility	Initial Eligibility Determination		X	X	X	X		X	X	X	X	X
	Changes in Eligibility		X	X	X	X	X	X	X	X	X	X
Financial Management	Accounts Payable	X	X	X	X	X	X	X	X	X	X	X
	Accounts Receivable	X	X	X	X	X	X	X	X	X	X	X
	Claims	X	X	X	X	X	X	X	X	X	X	X
Administration	Staff Management	X	X	X	X	X	X	X	X	X	X	X
	Reporting	X	X	X	X	X	X	X	X	X	X	X
	Administrative Support	X	X	X	X	X	X	X	X	X	X	X
Interfaces	Required Interfaces	X	X	X	X	X	X	X	X	X	X	X
	Optional Interfaces	X	X	X	X	X	X	X	X	X	X	X
Quality Assurance	Quality Assurance	X	X	X	X	X	X	X	X	X	X	X
Additional Functionality	Additional Functionality	X	X	X	X	X	X	X	X	X	X	X

3.2.2 Problem/Opportunity Assessment

While each of the above identified intersections has an associated problem and opportunity, this section focuses on program and system elements to be addressed by the proposed solution. Operational deficiencies exist in the areas of:

- SACWIS Compliance
- Resource Utilization
- System Access
- Information Exchange Interfaces
- Business Collaboration
- Outcome-driven planning, management and assessment

3.2.2.1 SACWIS Compliance

Problem: The current system is missing several functional areas required to meet SACWIS compliance.

Impact: Failure to meet full SACWIS functionality could result in a reduction in FFP (currently at 50 percent) for state and county child welfare automation and a potential payback of a significant portion of the federal funds for child welfare automation development, maintenance, and operations funds provide to the State and counties since the early 1990s. Specific information on the impacts of FFP reduction and potential payback is described in Section 3.2.1.

Opportunity:

- **Provide Adoptions Case Management Capabilities**

Issue: The current system does not provide adoptions case management functionality and is a barrier to meeting requirements of many recent state and federal laws, data reporting, and adoptions case management expansion under realignment. It currently only collects Adoption and Foster Care Analysis and Reporting System (AFCARS) data elements and provides minimal support for the Adoption Assistance Program (AAP). As a result, statewide data reporting is missing client information. The State and counties have had to develop and maintain interim external systems to support their adoptions workload.

Approach: The provision of Adoption Case Management functionality will change how case CWS workers manage all activities associated to the adoption of a child. This will improve efficiency in updating adoption information, conducting adoptability assessments, conducting interviews with prospective adoptive caregivers, matching of adoptive applicants with children, AAP process, and performing adoptive placement and post-placement supervision. Supervisors and managers will be able to address caseload and workload and effectively direct workflow in a manageable way.

- **Enhance Eligibility Determination**

Issue: SACWIS requirements mandate that the SACWIS system or a single external system provide for the ability to establish an individual's Title IV-E Foster Care Eligibility, and ensure that all eligibility factors are consistently and accurately applied statewide. Currently, foster care eligibility determination requires the use of multiple county and state systems. The IV-E Eligibility Determination (ED) process imposes a heavy workload on CWS workers and eligibility workers because of the manual, labor-intensive processes. CWS and eligibility workers have to access a variety of disparate systems (CWS/CMS, SAWS consortia, and MEDS) to gather all of the required information for IV-E cases. The presence of multiple systems means that the process can vary in its implementation from one county to another.

Approach: The IV-E ED process must be integrated into a single service throughout the State to improve its accuracy and remove inconsistent application of policy among eligibility workers and counties. CWS workers and eligibility workers require much of the same information, but have very different responsibilities and often report to separate organizations. Provision of a single statewide service that implements only one process for determination of Title IV-E eligibility will result in consistency and efficiency in execution of state practice and federal compliance.

- **Provide Missing Required Information Exchange Interfaces**

Issue: The current system does not support automated interfaces to federal SACWIS required data repositories. The interfaces need to provide an automated exchange of common and/or relevant data (information) to support child welfare services practice.

Approach: These interfaces enable the CWS worker to determine who lives in the home and the financial situation of that home, information that is critical for child safety assessments, case planning and case management. The required SACWIS interfaces are as follows:

- Title IV-A Information Exchange Interface (Temporary Assistance for Needy Families [TANF])
- Title IV- D Information Exchange Interface (Child Support Enforcement)
- Title IV- E Information Exchange Interface (Foster Care Eligibility determination)
- Title XIX Information Exchange Interface (Calculation and Tracking of Medicaid eligibility)

- **Provide Missing Financial Management Capabilities**

Issue: The current system does not provide financial-management functionality to support emergency assistance, foster care, KinGAP, AAP, and CWS service-connected expenses.

Approach: The provision of this capability will enable the worker to determine available services, prevent overpayments and resolve underpayments to Caregivers and Service Providers. The functional scope will provide support to the financial processes associated with Accounts Receivable, Accounts Payable and Claims processing.

3.2.2.2 Resource Utilization

Problem: The current CWS/CMS has a number of built-in limitations that do not support tasks directly focused on protecting children and providing services to families. Further, the cost and time required to solve problems, resolve deficiencies, and/or develop enhancements to the CWS/CMS are prohibitive.

Impact: Families and children do not get timely services. The inability to respond rapidly with the most complete information impacts the ability to protect the health and safety of children. The case worker's ability to utilize the system to access information, execute information searches, identify service providers or analyze available foster placements on the system is greatly restricted.

Opportunity:

- Enhance Data Entry Through Improved Navigation Design

Issue: Existing menu navigation hierarchies require numerous drill-down actions to get to data entry screens. Users often have to access multiple screens, drill up and then drill down again just to enter basic data. Navigation is not always intuitive. Processing time to save data is slow and cumbersome. Similar data must be entered into different navigation hierarchies within the system.

Approach: Existing data needs to automatically populate forms (screens/pages) whenever they are presented to the user. Data that is acquired from external sources needs to be managed to support automatic and logical presentation to users as they navigate the system.

- Enhance Interactions/Information Exchanges Through Automated Workflow Management

Issue: The current system does not provide any workflow automation to support the worker, supervisor, support agency or service provider interactions/information exchanges over the life cycle of a case. The manual execution of these interactions/information exchanges results in a decrease in user efficiency and successful case management.

Approach: Worker, supervisor, support agency or service provider interactions/information exchanges need to be managed by a configurable, automated process engine that initiates and monitors the interactions/information exchanges and reports on their timeliness and execution.

3.2.2.3 System Access

Problem: Users have limited access to CWS information while outside their office environment.

Impact: Limited system access outside the office environment causes the CWS worker to spend more in-office time preparing/collecting information to support the in-field activities with the children and families. Non-CWS workers (e.g., Indian tribes, family and juvenile courts and court officers, Independent Living Program service providers, mental health and other therapeutic service providers, law enforcement agencies, foster parents, health and education providers, and public health nurses) have little or no access to system information relevant to execution of their responsibilities. This impacts the Worker caseload as they need to respond to inquiries or collect information from this support population.

Opportunity:

- **Enhance CWS worker System Access Through Provision of Mobile Capabilities**

Issue: Limited/inefficient access to system/practice information outside the office environment limit the CWS workers decision making and case management capabilities.

Approach: CWS workers need to be able to execute business functions that define the CWS practice prior to, during and/or immediately after recordable events occur. Many of the tasks executed on a daily basis (i.e., court appearances, medical appointments, home visits, etc.) result in “wait-time” that could be utilized for planning or updating the current or other cases. The introduction of mobile computing capabilities (Remote Access and Computing) could extend the CWS workers daily productive work time and could be utilized in situations such as the following:

- While in court, case disposition information can be entered
- While waiting for court appointments, or while waiting with a child at a doctor’s appointment, the case worker could review, enter and update case information
- When investigating a referral, a worker could better access and review family information to provide a more complete assessment of a child’s safety in the home
- When investigating a referral, a worker could better access and review family information or evaluate and better respond to new information from the family to provide a more complete assessment of a child’s safety in the home
- While in the home performing assessments or follow-up appointments, data can be reviewed and/or entered during or shortly after the visit
- While performing after hour’s duties, case/referral data could be accessed for better assessment of the child and the family

- As information is obtained while out in the field during personal interviews, phone conversations, visits with other organizations, information can be directly entered.
- **Enhance Service Organization and Service Provider Access to System Information**

Issue: Because family members, service organizations and service providers have little or no access to system information, the CWS worker has to personally/manually communicate approved services/referrals and can only monitor delivery of those services in the same personal/manual manner.

Approach: The provision of a “self-service” capability to the family members, service organizations and service providers would allow more interactive collaboration between these individuals and the CWS practice/CWS worker(s). Members of a family unit could check on their approved services and providers of those services. Service organizations could monitor their referrals. Service providers could monitor their referrals and more easily report delivery of assigned services.

3.2.2.4 Information Exchange Interfaces

Problem: The current environment does not support county operational or SACWIS mandated requirements for information exchange with supporting program data repositories. Specific deficiencies exist with:

- Information exchange with the Title IV-A (CalWORKS) data repository
- Information exchange with the Title IV-D (Child Support) data exchange
- Information exchange with the Title IV-E (Foster Care) data repository
- Information exchange with the Title XIX (Medi-Cal) data repository
- Information exchange with the county financial management data repositories

Other information exchange requirements involve state business practice collaborative agency partners such as the Department of Justice (DOJ), the Department of Motor Vehicles (DMV), family and juvenile courts, public health organizations and educational institutions; as well as collaborative systems such as the Statewide Automated Welfare Systems (SAWS).

Impact: The lack of interfaces with collaborative agencies and systems results in less efficient work processes, a heavier administrative workload, untimely information availability, duplicate data entry across systems, data inconsistency, potential delays in provision of services and benefits to the child and family, and potential overpayments for delivered services. Untimely or incorrect information availability/access results in delays in or incorrect eligibility determinations, which negatively affects both the care of children and inaccurate expenditure of foster care funds.

Opportunity:

- **Enhance** Collaborative, Bi-Directional Information Exchange Capabilities

Issue: The current information exchange capabilities with supporting program data repositories is either non-existent or ineffective “batch-type” processes.

Approach: The ability to access information specific to the execution of the CWS business practice needs to be provided in time intervals that are aligned with the change dynamics of the data and the decision making needs of the CWS worker population. The majority of the collaborative data information exchanges potentially will need to align with real-time or very limited time latency intervals, and may be driven by automated workflow rules and processes.

3.2.2.5 Business Collaboration

Problem: The current environment does not support child welfare and family support services collaboration with community and governmental resources to serve families in a comprehensive multi-disciplinary manner. The current process of sharing information and collaborating on cases is inefficient and subject to multiple errors. The physical process requiring printing of case/client information to facilitate business collaboration is cumbersome and inefficient. Often the information contained on the printout has to be re-keyed by the other workers into their system.

Impact: The existing technology does not facilitate automated interaction with community partners or allow sharing of information necessary for multi-disciplinary team development of a case plan for services and support of families. Families requiring services from multiple programs routinely find they are assigned one or more CWS workers for each program and are asked many of the same questions by CWS workers from these different organizations.

Opportunity:

- **Enhance Support Service Collaboration Capabilities**

Issue: Participants in the child welfare process, including Indian tribes, family and juvenile courts and court officers, Independent Living Program (ILP) service providers, mental health and other therapeutic service providers, law enforcement agencies, foster caregivers, health and education providers, adoption agencies, and public health nurses, need the ability to input and access information to effectively participate in multi-disciplinary case management.

Approach: The provision of a “self-service” capability would allow more interactive collaboration between these individuals and the CWS practice/CWS worker(s). Support Service participants would be able to monitor their referrals, more easily report delivery of assigned services and become participants in the process through enhanced workflow and resource management functionality associated with collaboration meeting automation, calendaring, virtual meetings, etc.

3.2.2.6 Outcome-Driven Planning, Management and Assessment

Problem: Outcome-driven planning, management and assessment requires integration of the information collection and management processes with the assessment and case plan execution processes. The current system does not provide cross-functional integration of planning, management and assessment processes within a single operational environment. Integration is restricted by the navigational model utilized to access services or the existence of services in external, non-integrated systems.

Impact: Because planning, management and assessment activities are resident in non-integrated system processes or external systems, the CWS worker has to execute planning functions in one area of the system, manage the process through several functional silos within the system and carry (mentally or on printed sources) insight and information to be used in external assessment activities. This results in excessive time and often results in inaccurate conclusions and delayed decisions.

Opportunity:

- **Enhance Safety and Risk Assessment Capabilities**

Issue: Currently there are two methods used to execute Safety and Risk Assessments. Both methods are external to the existing system. The Comprehensive Assessment Tool (CAT) which is utilized by four counties and Structured Decision Making® (SDM®) utilized by 54 counties. Counties access these tools through third party software. Case workers do not have direct access to either SDM® or the CAT via CWS/CMS.

Approach: A single, integrated statewide risk assessment service needs to be provided with the new system. Provision of such a service will facilitate consistency in collection and sharing of information throughout the life of the case. This will allow compliance with a SACWIS requirement for a single process and maintenance of the assessment information in the central system data repository.

- **Enhance Tracking and Communication with the Family and Juvenile Courts**

Issue: The current system provides the ability for the CWS worker to write the court report, once the report is written the balance of the process becomes a manual administrative task between Child Welfare Services and the Court. These manual processes include the process of creating the hard copies of the different reports, preparing all copies, routing for reviews, reviewing, tracking, transporting and delivering legal documents to and from the court (court reports, court results, calendars, minute orders, etc), and all affected parties associated with the hearings (including the children, parents, lawyers, and other parties). These manual processes have many points of failure in meeting the judicial mandates for hearings which causes delays in hearings and ultimately delays and disruptions for the children and families served.

Approach: Automating an interface between the courts and the CWS-NS will significantly improve the preparation, accuracy, and movement of legal

documents and court orders that are a major critical administrative task in child welfare and adoptions.

The result would greatly increase the efficiency of child welfare, probation, law enforcement and court workers involved in these legal processes.

3.3 Business Objectives/Benefits

Collaboration between family members, CWS workers and Service Providers is essential to the achievement of positive outcomes. Through implementation of the recommended solution, the State has the opportunity to improve service delivery and outcomes, allow quicker system enhancements to keep pace with changes in CWS practice, and become SACWIS compliant to retain FFP funding levels and avoid potential federal payback. Problems with the current system impact CWS workers' ability to administer Title IV-E (including eligibility determination) and IV-B programs as efficiently, effectively, and economically as possible. CWS/CMS users experience problems with the current system because it cannot support evolving requirements for critical interfaces, integrated service delivery, streamlined workflow, or outcome-driven planning, management, and assessment. Through implementation of the recommended solution, the State has the opportunity to increase the amount of time CWS workers can spend with children and families. In addition, the counties are operating in a deficit condition related to staffing. Current staff reductions, increased data input requirements, and manual paperwork processes force them to function in a "triage" state (only working on the most critical issues) on a regular basis. Automation will provide relief from the numerous administrative processes which will allow for redirection of worker time back to the clients, providing services and improve outcomes for the kids. The following narrative highlights the problem/opportunity items that define the business objectives of the CWS-NS project:

- **Data Entry and Workflow**

End users must perform data entry tasks that are redundant in nature and lack support for workflow functions. In particular, the technical architecture is designed such that concurrent or simultaneous data updates to the same case record are difficult to achieve. In addition, data entered in one area of the application does not consistently populate the same data fields in other areas

The technical architecture also lacks support for automating current workflow solutions. This results in a decrease in user efficiency and successful case management. For example, multiple workers will update a case during its lifetime for purposes of court hearings, placement changes, eligibility determinations, etc. These users need the ability to update the record as their workflow dictates rather than when the case record is unused.

Currently, caseworkers must manually enter case data into CWS/CMS. CWS case aids, ancillary CWS Service Providers, and data entry clerks are increasingly employed to enter routine data because data entry is often a time consuming activity. This is the result of complex menu navigation to reach data entry screens, requirement to enter similar data repeatedly, and number of fields requiring

manual data entry. During development of the CWS/CMS Strategic Plan, a needs assessment involving more than 350 stakeholders was conducted. During this assessment effort, stakeholders identified numerous technology changes to increase user efficiency by providing more modifications and enhancement to the CWS/CMS data entry mechanisms. Among the needs defined were:

- Simplify the data entry process, requiring fewer screens with less downloaded data.
- Automatically notify others when a change occurs, when the change affects the area the users are in and need to be aware of (e.g., when a placement change occurs send an update notification to an eligibility worker).
- Automatically populate forms and/or reports with case data that already exists within the system.
- Enable users to access information in multiple cases simultaneously.
- Increase system flexibility regarding business rules and navigational order of required input.

Currently, approximately 2 percent of a user's time is spent on redundant data entry and navigation among many application screens. Redesign of the system could provide opportunities for more time spent with at-risk children and families, as well as increased productivity.

- **Limited Mobility System Access**

End-users currently have limited access to CWS/CMS while in the field. Based on the current fat-client technology, opening a case results in an average of approximately 100 kb of data transferred from the host to the client workstation. The data transfer time for this single transaction could be over 4 minutes (the average user executes 14 CWS/CMS transactions per day (275,000 transactions per day divided by 17,000+ active users)). A code update on a user's portable workstation sometimes takes several hours to complete. If timely remote/mobile system access were available, workers could use CWS/CMS while away from the normal office environment. This would create a "virtual office" by providing these workers the same access to resources whether at home, in the office, or on the road. Currently, remote access to the CWS/CMS is cumbersome or the ability to connect is not available. Caseworkers have identified the need to retrieve and record information while in the field. A few examples of how this remote technology could be applied are as follows:

- While in court, case disposition information can be entered.
- While waiting for court appointments, case information can be entered.
- While in the home performing assessments or follow-up appointments, data can be entered during or shortly after the visit.

- As information is obtained while out in the field during personal interviews, phone conversations, visits with other organizations, information can be directly entered into CWS/CMS.
- Improved remote access would allow the CWS worker to spend more time in the field with the children and families. In the future, additional types of users (e.g. Bureau of Indian Affairs, courts and court officers, case aides and clerks, juvenile probation officers, Independent Living Program service providers, mental health and other therapeutic service providers, law enforcement agencies, foster parents, health and education providers, and public health nurses) could access the system.
- With a greater ability of remote access, information could be entered into the system in a more timely fashion. In addition, this ability provides a more collaborative environment as information can also be directly accessed while in the field.
- Improve the CWS worker's access to system information outside the standard office environment
- Improve Service Provider and Service Organization access to business practice and individual case information

- **Document Storage**

There is a need to provide the ability to store multiple electronic document types. For example, many Juvenile Court judges are requiring the use of digital photographs in the case record, which necessitates storage and management of digital photographs. Currently the CWS/CMS only supports storing of Microsoft Word documents. With improved technology, the ability to store and retrieve a variety of electronic document types (i.e., pictures, scanned images, signatures, etc.) could be achieved. This would allow the CWS worker to store pictures of abused children, pictures of living conditions, and the ability to store legal documents from court (e.g., third party reports).

- **SACWIS Interfaces**

Multiple barriers reduce service delivery efficiency to troubled families - Income support, employment services, and CWS are offered by the same agency in most California counties. However, families requiring services from multiple programs routinely find they are assigned one or more caseworkers for each program and asked many of the same questions by those different workers. The current process of sharing information and collaborating on cases is inefficient and subject to multiple errors. The physical process requiring printing of case/client information to share with a co-worker treating the same client, or members of the same family, is very cumbersome. The information contained on the printout is re-keyed by the other worker into the other system. For example, a CWS worker places a child in foster care. Information on the child and a case is printed out and given to the eligibility worker. The eligibility worker then re-enters the information into his/her respective system. As the paper is printed and distributed to and from the various

workers to share information, it is sometimes lost and/or mishandled. Additionally, because of time and job pressures, it is sometimes not entered into the other system. The current process of sharing information and collaborating on cases is cumbersome, inefficient, and subject to multiple errors. These multiple barriers can be reduced through implementation of the SACWIS interface functionality.

- **SACWIS Title IV-E Eligibility Determination**

SACWIS requirements mandate that CWS/CMS or an external system must provide for the ability to establish an individual's eligibility and ensure that all eligibility factors are consistently and accurately applied. Lack of Title IV-E eligibility determination puts the project at risk for loss of certification status and ineligibility for enhanced Federal Financial Participation (FFP). The impact of not implementing this functionality amounts to more than twenty minutes of manual work per CWS worker per week.

No Automated IV-E Eligibility Determination

Heavy workload for IV-E eligibility determination – The IV-E eligibility determination (ED) process imposes a heavy workload on CWS workers and eligibility workers due to the prevalence of manual, work-intensive processes. Social and eligibility workers have to access a variety of disparate systems (CWS/CMS, CalWORKS, Medi-Cal, Income Eligibility and Verification System (IEVS), county payment systems) to gather all of the required information for a IV-E case. Integration between these systems is limited, increasing the problems of excessive data entry, storage of redundant information, and inconsistent data. In addition, probation officers who belong to a separate agency and have no access to any child welfare systems handle probation cases. The lengthy IV-E ED information gathering process can take anywhere from two hours to two days. This results in the need for additional staff and reduces the time CWS workers can spend with their clients. It increases the administrative overhead associated with the transmission of paper documents between facilities and workers because paper files are maintained in multiple locations.

Inaccurate and inconsistent determination of IV-E eligibility – IV-E Eligibility Determination is primarily a manual process that can vary in its implementation from one county to another. The IV-E Eligibility Determination process must be automated throughout the State to improve its accuracy and remove inconsistent application of policy among eligibility workers and counties. Furthermore, CWS workers and eligibility workers require much of the same information, but have very different responsibilities and often report to separate organizations. These inconsistencies can significantly degrade the quality of services provided by the program.

- **SACWIS Adoptions Case Management**

The lack of adoptions case management functionality is a barrier to meeting recent state and federal laws, compromises the State's adoption program data, and is insufficient to meet the needs of a rapidly expanding statewide adoption program.

Beyond these business needs, SACWIS requirements mandate that CWS/CMS must provide the ability for a full case management function. The CWS/CMS currently is not in compliance and this puts the project at risk for loss of certification status and ineligibility for enhanced federal funding participation. The lack of full automation results in the manual processing of forms and reports, which ultimately delays successful outcomes.

The lack of adoptions case management functionality is a barrier to meeting the requirements of recent state and federal laws.

- The implementation of the federal Adoption and Safe Family Act (ASFA) and conforming state statute have created a significantly heightened priority on adoptions by requiring a hearing to discuss a permanent plan for the child, such as adoption, on every child residing in foster care more than one year. California law further requires that adoption determinations be based on an assessment by an adoption agency. Due to these laws, there is significant additional workload for adoptions, particularly in the area of child and applicant assessment, which is not supported by the existing application.
- AB 1544 (Statutes of 1997, Chapter 793) mandates concurrent planning to move children to permanent homes more quickly. Concurrent planning is a child welfare case planning methodology used when children are removed from their parents' custody due to abuse or neglect and placed into foster care. During the time efforts are being made to return the child home, a contingency plan is developed in the event reunification efforts are unsuccessful. Since this contingency plan is often adoption, this further increases the emphasis on adoption when children in foster care are unable to return home. The existing application does not provide support for concurrent services planning. This functionality would allow workers to document the two service tracks required by law and regulation in CWS/CMS.

The lack of adoptions case management functionality compromises the State's adoption program data.

- CWS/CMS captures minimal adoptions data. CDSS captures the remaining adoptions data through manual processes. Significant county and state efforts could be minimized if this were automated.

The existing adoption functionality is insufficient to meet the needs of a rapidly expanding statewide adoption program.

- Over the last few years, changes in both state and federal laws have increased emphasis on adoption to provide permanence for foster children who are unable to return to their parents. This new focus is moving more foster children to adoption than ever before. Through the California Adoption Initiative, the number of children placed for adoption nearly doubled from 3,265 in SFY 1995/96 to 6,141 in SFY 1998/99. These numbers have increased to over 7,000 for SFY 2005/06. In addition, the number of children freed for adoption has significantly increased over previous years.

- Historical data shows that less than 60 percent of children entering foster care in any given year will return to their parents within the first six years in foster care. With 74,000 children in care, the task of providing children with permanent homes is substantial. Without permanent homes, children will remain in foster care until age 21.

Given the expansion of the statewide adoption program, traditional quality assurance efforts are increasingly impractical. However, automated or online case reviews cannot be performed. The current CWS/CMS application is limited and cannot be used by the State to perform quality assurance functions on adoption cases. For instance, the CWS/CMS application cannot be used to determine if fundamental regulatory requirements have been met. The only current alternative is to review the physical case file, resulting in a significant investment in staff and travel costs. In order to meet the adoption needs of increasing numbers of children, public adoption agencies will have to begin working with the children, their birth parents and potential adoptive parents shortly after the children enter foster care. These agencies will have to be able to use the CWS/CMS to manage their case activities and record required adoption information on behalf of the child. An example of this involves case contacts.

- Current adoption functionality allows the shielding of adoption data elements. However, case contact narratives with children and adoptive applicants cannot be recorded in a way that is protected by adoption privilege early in the management of the case. The process for recording required information for these families on the CWS/CMS application does not support the business needs and does not meet the federal SACWIS requirements.

- **SACWIS Title IV-A (TANF) Interface**

SACWIS requirements mandate that CWS/CMS must provide automated exchange of common and/or relevant data with the Title IV-A system that collects information relating to the eligibility of individuals under Title IV-A (TANF). The CWS/CMS currently is not in compliance and this puts the project at risk for loss of certification status and ineligibility for enhanced federal funding participation. Today, CWS workers must manually access such data through SAWS, spending about five minutes per case. Automation provides an opportunity to save CWS worker time through an automated interface.

- **SACWIS Title IV-D (Child Support Enforcement) Interface**

SACWIS requirements mandate that CWS/CMS must provide automated exchange of information with the Title IV-D to establish and report a child support case. The CWS/CMS currently is not in compliance and this puts the project at risk for loss of certification status and ineligibility for enhanced federal funding. Today, CWS workers must spend about five minutes per case to help make placement decisions. Automation provides an opportunity to save CWS worker time through an automated interface.

• SACWIS Title XIX (Medicaid) Interface

SACWIS requirements mandate that CWS/CMS must provide automated exchange of information needed by the State Medicaid eligibility system to calculate and track Medicaid eligibility. The CWS/CMS currently is not in compliance and this puts the project at risk for loss of certification status and ineligibility for enhanced federal funding. Today, CWS workers must spend about five minutes per case to help make placement decisions. Automation provides an opportunity to save CWS worker time through an automated interface.

- Improve the accuracy and completeness of data through information exchange interfaces to SACWIS Title IV-A (TANF), SACWIS Title IV-D (Child Support Enforcement), SACWIS Title XIX (Medicaid), SACWIS Title IV-E Eligibility Determination, DOJ and other agency data repositories.
- Provide information exchange interfaces to the family and juvenile courts to facilitate enhanced communications resulting from improved information availability and exchange.
- Increase client/provider benefits support through improved financial management system information exchange interfaces

The following table identifies the business area and business problem/opportunity that define the objectives to be achieved through the services provided by the new solution.

Table 3-6 – Business Objectives Analysis

BUSINESS AREA	BUSINESS PROBLEM OR OPPORTUNITY	BUSINESS OBJECTIVES
1.0 Information Management	1.1 High number of manual data entry and approval processes result in data entry errors which contribute to a large number of erroneous foster care payments issued.	1.1.1 Reduce unrecoverable Foster Care Overpayments by 1% by October 2018
2.0 System Design	2.1 The workers have limited ability to mobile access to the system which results in inefficiencies in staffing and contributes to child placement stability issues.	2.1.1 Reduce the number of inefficiencies in completing assessments from 8 hours to 6 hours through virtualizing the office by October 2018.
		2.1.2 Reduce the number of inaccurate assessments by 1% of 100,000 cases by virtualizing the office by October 2018.
3.0 Document Management	3.1 CWS/CMS has limited capability to store and retrieve large volumes of critical information required by the worker resulting in the untimely access to information contributing to the providing timely and accurate	3.1.1 Improve the delivery of critical information to the workers by 2 hours per week by October 2018.

	client services.	3.1.2 Reduce client services referral errors by 5% of 500,000 referrals by October 2018.
4.0 SACWIS Compliance	4.1 High number of manual data entry processes for eligibility results in increased CWS worker administrative overhead causing reduced time spent with clients.	4.1.1 Increase average time spent with clients by 1 hour per worker per day by October 2018.
		4.2.1 Reduce average adoptions case reporting time by 6 hours from 20 hours per case by October 2018.
	4.2 High number of manual data entry adoption case management processes results in increased time to complete an adoption causing increased placement costs.	4.2.2 Reduce average time for routing adoption forms by 30 minutes from 120 minutes per case by October 2018.
		4.2.3 Reduce average adoption forms completion by 6 hours from 20 hours per case by October 2018.
		4.2.4 Reduce payment of foster care monies from \$60 to \$30 per day, per case for each month over 24-months of eligible children (children with parental rights terminated) to AAP by October 2018.
	4.3 Ongoing delays of implementing SACWIS functional areas jeopardizes FFP funding and creates the possibility of payback of funding.	4.3.1 Implement the remaining seven major SACWIS functional areas to prevent increasing current annual SGF costs, from \$40 million per year to approximately \$51 million per year by October 2018.
		4.3.2 Implement the remaining seven major SACWIS functional areas to pass federal auditing by October 2019 to prevent possible FFP payback of all prior FFP payments to the state.

3.3.1 Project Performance Indicators Evaluation Plan

The following table provides a description of the business objectives, recipient of value, performance indicators, the date to achieve the target, and the methodology to measure the performance level. The target estimates are planned to be measured against the baseline one year after full implementation of the CWS-NS, which is planned to occur in September 2017.

Table 3-7 – Project Performance Indicators Evaluation Plan

BUSINESS OBJECTIVE	RECIPIENT OF VALUE	METRIC	BASELINE	TARGET	BY DATE	METHODOLOGY
1.0 Information Management						
1.1.1 Reduce unrecoverable Foster Care Overpayments by 1% by October 2018	58 counties, CDSS and the State of CA	Total unrecoverable Foster Care Payments per month by 1 percent	\$375,000 per month	\$ 371,250 per month	Oct 2018	Statistical analysis of the reported unrecoverable Foster Care Overpayments and the total \$ recovered
2.0 System Design						
2.1.1 Reduce the number of inefficiencies in completing assessment from 8 hours to 6 hours by virtualizing the office by October 2018	58 counties, CDSS and the State of CA	Total hours worked outside assigned office	170,000 hours	270,900 hours	Oct 2018	Statistical analysis of the case-related assessment hours executed from mobile devices
2.1.2 Reduce the number of inaccurate assessments by 1% of 100,000 cases by virtualizing the office by October 2018.	58 counties, CDSS and the State of CA	Total number of inaccurate assessments	3% of 100,000 cases	1% of 100,000 cases	Oct 2018	Statistical analysis of accuracy of the case-related assessments executed from mobile devices

BUSINESS OBJECTIVE	RECIPIENT OF VALUE	METRIC	BASELINE	TARGET	BY DATE	METHODOLOGY
3.0 Document Management						
3.1.1 Improve the delivery of critical information to the workers by 2 hours per week by October 2018	58 counties, CDSS and the State of CA	Number and type of documents submitted and successfully stored in the document repository	10 per referral plus 10 per case	5,000 per referral plus 15,000 per case	Oct 2018	Statistical analysis of the number and type of documents submitted and associated with cases
3.1.2 Reduce client services referral errors by 2% of 100,000 referrals by October 2018	58 counties, CDSS and the State of CA	Total number of referral errors	4,000 client services referral errors	2,000 client services referral errors reduced	Oct 2018	Statistical analysis of the number and type of documents submitted and associated with cases
4.0 SACWIS Compliance						
4.1.1 Increase average time spent with clients by 1 hour per worker per day by October 2018.	58 counties, CDSS and the State of CA	Elapsed time required to complete entry/ submission of eligibility data	45 minutes per case	40 minutes per case	Oct 2018	Performance measurement and analysis of the average data entry time of information for eligibility determination
4.2.1 Reduce average adoptions case reporting time by 6 hours from 20 hours per case by October 2018	58 counties, CDSS and the State of CA	Average of the total time per case required to complete adoption case reporting activities	20 hours per case	14 hours per case	Oct 2018	Statistical analysis of the total time per case required to complete case reporting activities
4.2.2 Reduce average time for routing adoptions forms by 30 minutes per case by October 2018	58 counties, CDSS and the State of CA	Average of total time required per case to complete adoption case form routing activities	2 hours per case	1.5 hours per case	Oct 2018	Statistical analysis of the total time required per case to complete form routing activities

BUSINESS OBJECTIVE	RECIPIENT OF VALUE	METRIC	BASELINE	TARGET	BY DATE	METHODOLOGY
4.2.3 Reduce average adoption forms completion by 6 hours from 20 hours per case by October 2018.	58 counties, CDSS and the State of CA	Average of the total time required per case to complete adoption case forms	20 hours per case	14 hours per case	Oct 2018	Statistical analysis of the total time required per case to complete case forms
4.2.4 Reduce payment of foster care monies from \$60 to \$30 per day, per case for each month over 24-months of eligible children (children with parental rights terminated) to AAP by October 2018	58 counties, CDSS and the State of CA	Total foster care monies paid due to accelerated movement of eligible children to AAP	\$60 per day	\$30 per day	Oct 2018	Statistical analysis of the total foster care monies paid due to accelerated movement of eligible children to AAP
4.3.1 Implement the remaining seven major SACWIS functional areas to prevent increasing current annual SGF costs, from \$40 million per year to approximately \$51 million per year by October 2018.	58 counties, CDSS and the State of CA	Prevent increasing current annual SGF costs,	\$51 million per year	\$40 million per year	Oct 2018	Implement the remaining seven major SACWIS functional areas
4.3.2 Implement the remaining seven major SACWIS functional areas to pass federal auditing by October 2019 to prevent possible FFP payback of all prior FFP payments to the state.	58 counties, CDSS and the State of CA	Pass Federal auditing by October 2019	Partial compliance with SACWIS functional areas	Full compliance with SACWIS functional areas	October 2019	Implement the remaining seven major SACWIS functional areas

3.4 Business Functional Requirements

At the highest level, the State and county child welfare programs seek to protect children from abuse and neglect, support and help families to care for their children safely, and enhance the well-being for all clients served. This mission drives the business needs, objectives, and functional requirements of the Child Welfare Services automated system.

SACWIS defines the universe of child welfare services provision in a schema of high-level business functions. The first three high-level functional areas (Intake Management, Eligibility, and Case Management) trace the basic CWS business process from the collection, screening, and investigation of a referral through the court process, case plan development, service provision, concurrent planning, case status monitoring, and permanency planning. Additional functional areas define requirements for Resource Management, Court Processing, Financial Management, Administration and Interfaces.

The below SACWIS Requirements Matrix provides a high-level view of the federal SACWIS requirements and documents California's current and planned implementation of each one.¹ The columns in the table contain the following information:

- **Business Segment:** Each business segment represents the SACWIS high-level business functions that must be supported in the SACWIS system.
- **Function:** Each function represents a sub-process within the larger business segment. These sub-processes form the foundation for the decomposition into process/SACWIS requirements.
- **Priority:** Priority is defined by the SACWIS guidelines. Process/SACWIS requirement elements with an "R" are required, ones with an "O" are optional and ones with an "S" are state practice only requirements. Optional elements that have green highlight have been selected by the State for incorporation within the system. If a state determines that federal optional functionality is a state operational requirement, the State optional requirement becomes a mandate for federal SACWIS compliance.
- **Process/SACWIS Requirement:** Each process/SACWIS requirement represents functional capability that must be supported by the delivered system. Detail of the implementation of each process/SACWIS requirement has been captured in the Business Process Workflows and Use Cases that define the business practice. These have been provided in the Business Process Workflow/Use Case. See Appendix G.

NOTE: The information in this table represents an update since the State filed its most recent SACWIS Assessment Review Guide in November 2000.

¹ The SACWIS requirements were taken from the following ACF's web site (<http://www.acf.hhs.gov/programs/cb/dis/sacwis/sacwis/sacwisreviewguide/appendb.htm>).

Table 3-8 - SACWIS Requirements Matrix

Business Segment	Function	Priority	Process/SACWIS Requirement
Intake Management	Intake	R	1. Record contact/referral
		R	2. Collect intake/referral information
		R	3. Search for prior history (persons/incidents)
		O	4. Record "information only" requests
	Screening	R	5. Evaluate intake information
		R	6. Record the results of the screening evaluation
		R	7. Establish case record
		R	8. Assign case to worker
		R	9. Refer for investigation and/or services, as appropriate
	Investigation	O	10. Collect and record investigation information
		R	11. Record investigation decision
		R	12. Generate documents as needed in response to investigation
	Assessment	R	13. Determine and record risk assessment
		O	14. Perform risk assessment
		R	15. Collect and record special needs/problems
		R	16. Determine and record needed services
		O	17. Record client contacts
		O	18. Prepare and record referrals to other agencies
		O	19. Collect and record further case information
		R	20. Generate documents, notices and reports based on review (as needed)
	State Practice	S	Initiate Differential Response
		S	Submit Suspected Child Abuse Report (SCAR)
		S	Process Received SCAR
		S	Conclude Investigation
Eligibility	Initial Eligibility Determination	R	21. Determine Title IV-E eligibility
		R	22. Record/track legal requirements related to title IV-E eligibility
		R	23. Determine/track a child's title IV-E eligibility in an out-of-home placement
		R	24. Verify eligibility for other programs
		R	25. Record authorization decisions
		R	26. Generate documents related to eligibility determinations
	Changes in Eligibility	R	27. Redeterminations
		R	28. Generate documents related to eligibility determinations
Case Management	Service/Case Plan	R	29. Prepare and document service/case plan
		O	30. Identify and match services to meet the client's case plan needs

Business Segment	Function	Priority	Process/SACWIS Requirement
		O	31. Record contact with and acquisition of needed resources/services
		R	32. Track and update service/case plan
		O	33. Match client to placement alternatives
		R	34. Generate documents (reports, alerts, ticklers & notifications)
		O	35. Request and record supervisory approval of plan
		O	36. Estimate and track actual costs of resources/services
		O	37. Identify program outcome measures
	Case Review/Evaluation	R	38. Generate alerts to conduct case review/evaluation (as needed)
		R	39. Conduct and record results of case review
		R	40. Generate documents, notices and reports based on review as needed
	Facilities Support	R	41. Record collateral contacts
	Monitoring Service/Case Plan Services	O	42. Track and record services identified in the service/case plan
		R	43. Generate documents, notices and reports
		S	Establish ILP
		S	Conduct Investigation
Resource Management	Facilities Support	R	44. Record and update provider information
		R	45. Generate alerts/action items on licensing status changes
		R	46. Generate reconciliation and evaluation reports as needed
		O	47. Record and track provider training
	Foster/Adoptive Homes Support	R	48. Maintain and update foster care and adoptive home information (as needed)
		R	49. Record foster care home abuse/neglect allegations and investigation results
		O	50. Process foster care/adoptive home applications
		O	51. Generate alerts/action items if foster care license is revoked (as needed)
	Resource Directory	O	52. Maintain directory
		O	53. Generate reports
	Contract Support	O	54. Process contracts and contract changes
		O	55. Record contract monitoring results
		O	56. Generate alerts/action items (as needed)
		O	57. Generate documents (as needed)
Court Processing	Court Documents	S	Create New Person in the System
		R	58. Provide for the preparation of State agency documents for family and juvenile courts

Business Segment	Function	Priority	Process/SACWIS Requirement
	Notifications	O	59. Notify relevant parties of impending court actions
	Tracking	R	60. Monitor and track court-related events requiring state agency action
	Indian Child Welfare Act	O	61. Support the requirements of the Indian Child Welfare Act
Financial Management	Accounts Payable	R	62. Support the accounts payable process
	Accounts Receivable	R	63. Support the accounts receivable process
	Claims	R	64. Provider claims processing
Administration	Staff Management	O	65. Record and update employee information
		O	66. Record and update employee information
		R	67. Record and track case assignment
		O	68. Assist in workload management
		O	69. Track employee training
		O	70. Document employee performance
	Reporting	R	71. Produce AFCARS report
		R	72. Produce other Federal Reports
		R	73. Produce state reports
		R	74. Produce statistical reports
	Administrative Support	R	75/76. Provide hardware and software security
		R	77. Provide hardware and software security (contingency plans)
		R	78. Archive and purge
		O	79. Provide office automation
		O	80. Provide on-line system documentation
		O	81. Provide on-line training
Interfaces	Required Interfaces	R	82. Provide for an electronic data interface with other systems
		R	83. Title IV-A (AFDC)
		R	84. Title IV-D (Child Support Enforcement)
		R	85. Title XIX (Medicaid)
		R	86. Child abuse and neglect data system
	Optional Interfaces	O	87. State Central Registry
		O	88. Social Security Administration for title II and SSI information
		O	89. State financial system
		O	90. State licensing system
		O	91. Vital Statistics
		O	92. Court system

Business Segment	Function	Priority	Process/SACWIS Requirement
		O	93. Juvenile Justice
		O	94. Mental health/retardation
		O	95. State Department of Education
Quality Assurance	Quality Assurance	R	88. Quality assurance features incorporated in the system (edits, range checks, and prompts for critical or incomplete data)
		R	89. Other quality assurance functions or related features
Additional Functionality	Additional Functions	R	90. Additional functionality not already described

The following Capabilities Matrix provides a mapping between the business practice Use Cases and the SACWIS Business Segment/Business Function framework (identified in Table 3-4 – SACWIS Requirements Matrix above.) For each business function, a list of “Activity” and “Workflow” requirements has been provided. Each “Activity” represents a capability required by the business function that must be supported by automation (delivered in the solution). Each “Workflow” represents a process that must be supported in the workflow automation of the delivered system. Together, these two define the essential characteristics that the proposed solution must provide to satisfy the defined objectives. This table is a process-based alignment of business practice capability requirements (activity and workflow) with the defined Program Components (refer to Table 3 5 - Capabilities Matrix.)

1

Table 3-9 - Capabilities Matrix

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Intake	Intake	UC001 - Perform Referral Intake	<ol style="list-style-type: none"> 1. Record Referral Information 2. Scan document (create digital image) 3. Postal Service address validation 4. Create a new Referral 	<ol style="list-style-type: none"> 5. Intake Assessment/Safety Assessment 6. Automated referral assignment 7. Automated referral distribution to external support agencies 8. Automated scanned document information extraction and storage
Intake	Screening	UC002 - Perform Initial Screening	<ol style="list-style-type: none"> 1. Review system provided current and prior history 2. Multiple family involvement referral split 3. Determine response type 	<ol style="list-style-type: none"> 4. Automated determination that Referral belongs to another county 5. Automated Referral routing to another county 6. Automated linking to existing open and closed Referrals 7. Automated worker notification of approved Referral "Evaluate Out"
Intake	Investigation	UC006 - Investigate Referral	<ol style="list-style-type: none"> 1. Review assigned referrals 2. Review specific Referral 3. Review referral hierarchical information 4. Review Case history 5. Review/execute an Assessment 6. Develop safety plan 7. Execute contact(s) 8. Generate and print documents 9. Capture electronic signatures 10. Capture referral conclusion 	<ol style="list-style-type: none"> 11. Supervisor notification of un-viewed Referral(s)

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Intake	Assessment	UC092 - Perform Assessment of Safety and Risk	<ol style="list-style-type: none"> 1. Execute a new Safety Risk Assessment 2. Update an existing Safety Risk Assessment 3. Record assessment results and/or decisions 4. Acquire background data for assessment via interfaces 5. Acquire background data for assessment from the system database 6. Record contact results 7. Record alternative assessment recommendation (with rationale) 	<ol style="list-style-type: none"> 8. Automated system determination of required assessment(s) to be completed 9. Automated worker notification of required assessment(s) to be completed 10. Automated system determination that all information required to complete and assessment has been collected 11. Automated system determination of an assessment recommendation (based on assessment calculations) 12. Automated system association of assessment with client case record 13. County configurable assessment approval process 14. Automated (completed) assessment routing to Supervisor for approval 15. Automated system notification of additional assessments that require completion

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Intake	Assessment	UC093 - Perform Assessment of Strengths and Needs	<ol style="list-style-type: none"> 1. Establish a case plan goal 2. Capture information collected during each assessment 3. Initiate assessment calculations and recommendation 4. Review of assessment recommendation 5. Provision of alternative assessment recommendation (when Worker determines it is appropriate) 	<ol style="list-style-type: none"> 6. Automated system notification to complete a child/family strengths assessment 7. Automated system notification to complete a child/family needs assessment 8. Automated system notification to complete a parent/caregiver protective capacity assessment 9. Automated system notification to complete a child's placement needs assessment 10. Monitoring and display of assessment status in Worker's Referral/Case Checklist and/or Case/Referral required activities listing 11. Automated system validation that all necessary data to complete an assessment has been collected 12. Automated system notification of missing data required for completion an assessment 13. Automated system generated assessment recommendation 14. Automated system generated assessment overview (with County configurable requirement for viewing and validation of the calculated recommendation) 15. Automated system association of assessment with case record 16. County configurable assessment approval and closure processes
Intake	Assessment	UC094 - Perform Assessment of Safety Plan	<ol style="list-style-type: none"> 1. Initiate a safety plan 2. Schedule a meeting to discuss the Safety Plan 3. Attach copy of draft Safety Plan to meeting notice (if desired) 4. Update safety plan content as needed 5. Submit Safety Plan for Supervisor approval 6. Acquire signatures/electronic signatures on the final Safety Plan 	<ol style="list-style-type: none"> 7. Automated system generation of a Safety Plan

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Intake	State Practice	UC003 - Initiate Differential Response	1. Record Worker selected Differential Response level	2. Automated primary Worker and Supervisor notification of new Referral 3. Automated referral information transmittal to Licensing or Registration facility 4. Automated referral notification to county Assigner 5. Automated Response Assessment based on Referral information 6. Automated response level recommendation 7. Automated differential response service determination 8. Automated child welfare response need determination 9. Automated Worker safety information determination/inclusion in Referral
Intake	State Practice	UC004 - Submit Suspected Child Abuse Report	1. SCAR Reference Number based search	2. Verification of on-line SCAR submission 3. Automated routing of received SCAR to appropriate Worker
Intake	State Practice	UC005 - Process Received SCAR	1. Scan document (create digital image) 2. SCAR Reference Number based search	3. Automated association of SCAR to Referral 4. Automated routing of the SCAR to the District Attorney's Office 5. Automated routing of the SCAR to the Local Law Enforcement Agency 6. Automated routing of the SCAR to the Community Care Licensing Office 7. Automated Worker notification of SCAR receipt 8. Automated Referral Investigator notification of SCAR receipt 9. Automated scanned document information extraction and storage

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Intake	State Practice	UC098 - Conclude Investigation	<ol style="list-style-type: none"> 1. Record investigation results 2. Verify investigation is complete 3. Generate child abuse summary report 4. Record emergency response services end date 5. Activate/deactivate a case 	<ol style="list-style-type: none"> 6. System automated distribution of Child Abuse Summary Report 7. System automated notice generation 8. Route referral investigation results for Supervisor approval 9. Approved referral transferred for assignment 10. System automated worker notification of case assignment 11. System automated worker notification of scheduled contact(s)
Eligibility	Initial Eligibility Determination	UC042 - Initiate Benefit Application	<ol style="list-style-type: none"> 1. Acquire benefit application forms 2. Update system populated benefit application forms 3. Capture electronic signature 4. Capture child support referral determination 5. Update system populated child support questionnaire 6. Request approval of eligibility Benefit applications 7. Execute a non referral to child support 8. Execute child support waiver verification 9. Execute child support 	<ol style="list-style-type: none"> 10. Automated system population of benefit application forms 11. Automated notification of eligibility for other source income based on the eligibility Benefits application information 12. Automated system population of child support questionnaire 13. Automated notification of eligibility Benefits application approval/denial
Eligibility	Initial Eligibility Determination	UC044 - Process Benefit Application	<ol style="list-style-type: none"> 1. Review assigned cases and tasks 2. Review eligibility Benefit applications information 3. Update eligibility Benefit applications information 4. Request eligibility Benefit determination approval 5. Facilitate issuance of payment instructions 	<ol style="list-style-type: none"> 6. Automated notification that an eligibility Benefit application is pending 7. Automated notification that an AAP rate has been negotiated 8. Automated status determination 9. Automated notification of incomplete eligibility Benefit application information 10. Automated eligibility Benefit application processing based on Benefit type 11. Automated Benefit rate calculation 12. Automated eligibility date (start or finish) calculation 13. Automated Eligibility Worker (SAWS) notification of Benefit applications 14. Automated Emergency Shelter Care payment determination

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
				15. Automated Eligibility Worker (SAWS) notification of determination decisions 16. Automated clothing allowance calculation 17. Automated supplemental rate calculation for Whole Foster Family Home with a Shared Responsibility Plan 18. Automated notification of potential Special Care Increment (SCI) or Infant Supplemental eligibility 19. Automated Child Health and Disability Prevention (CHDP) referral generation 20. Automated redetermination due date calculation and Worker notification/tasking 21. Automated eligibility Benefit application approval status change notification
Eligibility	Initial Eligibility Determination	UC045 - Apply For Emergency Assistance Eligibility	1. Create an Emergency Assistance Application 2. Review the Emergency Assistance Application information 3. Update the Emergency Assistance Application information 4. Capture signature/electronic signature of Parent/Guardian or worker completing the Emergency Assistance Application 5. Request approval of Emergency Assistance Application 6. Review assignments and tasks 7. Determine child activity in the Assistance to Children in Emergency System (ACES)	8. Automated population of Emergency Assistance Application information 9. Automated notification to eligibility division of Emergency Assistance Application requiring assignment 10. Automated notification to Eligibility Supervisor when and assignment or task is not viewed within configured time period 11. Automated system assignment or task status management 12. Automated inquiry to check if child is active in the Assistance to Children in Emergency System (ACES) 13. Automated determination of Emergency Assistance Application eligibility 14. Automated Emergency Assistance eligibility period and aid code determination 15. Automated request through MEDS interface to update the Assistance to Children in Emergency System (ACES) 16. Automated Worker notification of Emergency Assistance application approval status

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Eligibility	Initial Eligibility Determination	UC046 - Initiate Adoption Assistance Program	<ol style="list-style-type: none"> 1. Receive AAP 1 from an adoptive caregiver 2. Initiate the Adoption Assistance Program (AAP) Benefit application 3. Review the Adoption Assistance Program (AAP) Benefit application 4. Update the Adoption Assistance Program (AAP) Benefit application 5. Request eligibility determination of the Adoption Assistance Program (AAP) Benefit application 6. Review assigned cases and tasks 7. Schedule/complete contact 8. Obtain electronic signature 	<ol style="list-style-type: none"> 9. Automated population of Adoption Assistance Program (AAP) Benefit application 10. Automated assignment of the Adoption Assistance Program (AAP) Benefit application 11. Automated Adoption Assistance Program (AAP) Benefit application status management 12. Automated determination of application information alignment with the federal title IV-E eligibility criteria 13. Automated notification of incomplete Adoption Assistance Program (AAP) Benefit application information 14. Automated AAP determination 15. Automated AAP Special Needs Eligibility determination 16. Automated judicial findings / signed relinquishment determination 17. Automated barrier to adoption determination (i.e., age, adverse parental background, minority ethnicity or physical/mental health problems) 18. Automated determination that no effort was made to locate a non-subsidy placement 19. Automated notification of eligibility determination 20. Automated applicant citizenship determination 21. Automated federal AAP eligibility determination 22. Automated county AAP eligibility determination 23. Automated State AAP eligibility determination 24. Automated determination of Federal AAP eligibility for non-applicable child 25. Automated determination of Federal AAP eligibility for applicable child

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Eligibility	Initial Eligibility Determination	UC086 - Determine AFDC-FC Eligibility	1. Refer applicant child case for Temporary Assistance for Needy Families (TANF)	2. Automated applicant child federal title IV-E eligibility determination 3. Automated applicant child citizenship and age requirement determination 4. Automated applicant child authority for placement determination 5. Automated Federal AFDC-FC application eligibility status management 6. Automated applicant child deprivation criteria determination 7. Automated applicant child income / property limit determination 8. Automated parent/guardian and child income AFDC-FG/U linkage criteria determination 9. Automated placement facility eligibility criteria (licensed or approved) determination 10. Automated Federal AFDC-FC application eligibility determination 11. Automated County AFDC-FC application eligibility determination 12. Automated State AFDC-FC application eligibility determination 13. Automated Worker notification of eligibility determination

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Eligibility	Initial Eligibility Determination	UC087 - Determine KinGAP Eligibility		<ol style="list-style-type: none"> 1. Automated applicant child KinGAP application eligibility criteria determination 2. Automated applicant child income property threshold determination 3. Automated applicant child citizenship and age requirements determination 4. Automated applicant child written agreement alignment determination 5. Automated applicant child “adjudged a dependent or ward of the Juvenile Court” eligibility criteria determination 6. Automated placement facility eligibility criteria (licensed or approved) determination 7. Automated determination that the child has lived with a relative caregiver for 12 consecutive months or more 8. Automated determination that relative guardianship per W&IC 366.26 or 727.3 has been granted by the Court 9. Automated determination that the child's dependency or wardship has been dismissed by the Juvenile Court
Eligibility	Initial Eligibility Determination	UC105 - Automate Other Payments		<ul style="list-style-type: none"> • Automated issue of the annual clothing allowance • Automated determination of the annual clothing allowance eligibility • Automated management of the annual clothing allowance eligibility status • Automated Worker notification of annual clothing allowance eligibility • Automated calculation of the annual clothing allowance amount • Automated calculation of the base rate Automated Worker notification of annual clothing allowance base rate change

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Eligibility	Initial Eligibility Determination	UC106 - Initiate Special Funding	<ol style="list-style-type: none"> 1. Establish child's Special Care Increment (SCI) parameters 2. Determine type of special funding 3. Update SCI information 4. Request SCI 5. Request SCI approval 6. Request Infant Supplemental funding 	<ol style="list-style-type: none"> 7. Automated population of Special Care Increment (SCI) information 8. Automated management of the SCI status 9. Automated Worker notification of approval status 10. Automated calculation of the SCI rate 11. Automated calculation of the SCI beginning date 12. Automated calculation of the SCI redetermination due date 13. Automated Worker notification of the redetermination due date 14. Automated Worker notification to apply for special funding 15. Automated determination if child is eligible for the infant supplemental assistance program 16. Automated management of the infant supplemental assistance program status 17. Automated calculation of the infant supplemental assistance program rate
Eligibility	Changes in Eligibility	UC043 - Initiate Eligibility Redetermination	<ol style="list-style-type: none"> 1. Review assigned tasks 2. Initiate Adoption Assistance Program 3. Update eligibility Benefit application information 4. Request redetermination eligibility Benefit application approval 5. Review assigned cases and tasks 6. Initiate Adoption Assistance Program 	<ol style="list-style-type: none"> 7. Automated assignment of redetermination tasks to a CWS Worker 8. Automated eligibility Benefit application information provided for redetermination task 9. Automated system population of benefit application forms 10. Automated system determination of incomplete eligibility redetermination Benefits application information 11. Automated notification of eligibility redetermination Benefits application approval/denial 12. Automated system determination of Benefit type, based on the submitted eligibility redetermination Benefits application information 13. Automated system calculation of Benefit rate changes 14. Automated system determination of

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
				overpayment/underpayment conditions
Case Management	Service/Case Plan	UC008 - Make a Case Plan Goal Decision	1. Review safety and risk assessment 2. Update client contact information 3. Perform Strengths and Needs assessments (child and/or parent) 4. Establish Family Maintenance as the Case Management decision 5. Establish Family Reunification as the Case Management decision 6. Establish Permanency Planning as the Case Management decision 7. Apply for Special Immigrant Juvenile Status (SIJS), when appropriate 8. Develop the case plan 9. Determine if Voluntary Services should be offered 10. Determine if Voluntary Family Maintenance or Voluntary Family Reunification Services should be offered	

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC009 - Develop the Case Plan	<ol style="list-style-type: none"> 1. Review the case management decision 2. Create a case plan 3. Review existing assessment information 4. Review existing Demographic Information 5. Review Strengths and Needs Assessment 6. Review Safety and Risk Assessment 7. Review sustained petition 8. Update case plan information 9. Update case management information 10. Update concurrent planning information 11. Determine case plan services required to meet objectives 12. Request approval 13. Request services and goods 14. Complete case plan 15. Capture signature on case plan 16. Manage services and goods information 	<ol style="list-style-type: none"> 17. Automated population of the case plan template 18. Automated Transitional Independent Living Plan (TILP) need determination 19. Automated provision of selected/populated case plan pages 20. Automated case plan deadlines, reminders and milestones population 21. Automated identification of services relevant to a particular selected Safety/Risk issue 22. Automated identification of services relevant to a particular sustained petition allegation
Case Management	Service/Case Plan	UC010 - Initiate Concurrent Planning	<ol style="list-style-type: none"> 1. Review Family Strengths and Needs 2. Review family demographic information 3. Determine Concurrent Case Plan goal 4. Perform Adoptability Assessment 5. Initiate Concurrent Case Plan 6. Update Concurrent Case Plan information 7. Assign secondary worker to Concurrent Case Plan 8. Schedule meeting/meetings to discuss case plan Concurrent Case Plan 9. Determine guardianship eligibility and alternatives 	<ol style="list-style-type: none"> 10. Automated population of the Concurrent Case Plan 11. Automated provision of pre-populated template for development of the Concurrent Case Plan 12. Automated Worker notification of missing Concurrent Case Plan information

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC011 - Monitor the Case Plan	<ol style="list-style-type: none"> 1. Review the case plan 2. Review case plan service objectives 3. Update case plan 4. Associate service objectives to abuse, allegations, and court ordered requirements 5. Monitor service objective attainment against abuse, allegations, and court ordered requirements 6. Communicate with Service Providers to discuss and identify possible needs 7. Record family and child progress 8. Address family and child needs 9. Capture court orders and findings 	<ol style="list-style-type: none"> 10. Automated management of the case plan status 11. Automated tracking of case plan changes to determine possible Worker actions
Case Management	Service/Case Plan	UC012 - Develop TILP Establish ILP	<ol style="list-style-type: none"> 1. Perform a Life Skills Assessment 2. Determine needs and resources available to the youth or other participants 3. Determine ILP Activities to associate with TILP Service Goal 4. Review case plan 5. Develop/Update case plan 6. Acquire child/family agreement/signatures on TILP 7. Acquire caregiver agreement/signatures on ILP 8. Monitor/Update TILP 9. Monitor/Update ILP 10. Request TILP goods and services 11. Request approval 12. Prepare court documentation 	<ol style="list-style-type: none"> 13. Automated Worker notification when child enters the age range for Independent Living Plan (ILP) 14. Automated Worker notification that a Transitional Independent Living Plan (TILP) needs to be established for a child 15. Automated population of ILP template with case information 16. Automated provision of Independent Living Plan (ILP) Service Goals 17. Automated association of the ILP Service Goals with the TILP 18. Automated provision of ILP activities that may be used to help achieve the Service Goal 19. Automated Worker notification of incentives offered to the youth to complete the ILP goals 20. Automated notification of next required update for the TILP
Case Management	Service/Case Plan	UC013 - Monitor and Update the TILP	<ol style="list-style-type: none"> 1. Review TILP information (especially information entered by external users) 2. Monitor progress against the TILP goals 3. Update the TILP information 4. Review/Gather information on needs and interests of youth 5. Prepare youth for emancipation 	<ol style="list-style-type: none"> 14. Automated population of TILP information 15. Automated notification of next required update for the TILP

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
			<ul style="list-style-type: none"> 6. Capture signatures for updated TILP (new goals, progress on existing goals) 7. Request services and goods 8. Notify Financial Management of authorized goods and funds 9. Notify Financial Management of tracking of expenditures used towards incentives 10. Request approval 11. Finalize TILP 12. Prepare court documentation 13. Develop transition plan 	
Case Management	Service/Case Plan	UC102 - Update the Case Plan	<ul style="list-style-type: none"> 1. Review secondary assignments for incomplete tasks 2. Schedule meetings 3. Update allowable case plan data elements 4. Review/Update case plan objectives 5. Review/Update case plan planned services and goods to address safety and risk factors, or new/modified court ordered services 6. Review Sustained Petition information 7. Request services and goods 8. Capture participant signature (wet or electronic) 9. Request approval 10. Provide participant with copy of case plan 11. Prepare court documentation 	<ul style="list-style-type: none"> 12. Automated population of active case plan information 13. Restriction of case plan updates to only allowable data elements 14. Automated population of Case Plan Calendar with reminders and milestones 15. Automated notification of Court Event Outcome requiring modifications to the Case Plan
Case Management	Service/Case Plan	UC111 - Request Special Immigrant Juvenile Status	<ul style="list-style-type: none"> 1. Permanency Planning Worker receives Form JV 224 Order Regarding Eligibility for Special Immigrant Juvenile Status and processes into system 2. Request approval 3. Review/Update I-360 Petition 4. Update person's information 5. Notify court of Immigration and Naturalization Service decision 	<ul style="list-style-type: none"> 6. Automated population of the I-360 - Petition for Amerasian, Widow(er) or Special Immigrant 7. Automated guidance through the process of collecting supporting information and documentation to complete Form I-360
Case Management	Service/Case Plan	UC112 - Activate a Case	<ul style="list-style-type: none"> 1. Search for adult and/or child in the system 2. Reactivate an inactive case 3. Activate a new case 	<ul style="list-style-type: none"> 6. Automated population of new case information (if child or parent exists in the system)

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
			4. Assign case to Worker 5. Update case information	7. Automated population of existing case record for inactive case 8. Automated determination of a change in placement 9. Automated Worker notification of a change in placement
Case Management	Service/Case Plan	UC113 - De-Activate Case	1. Update Client information 2. Review/Update case plan 3. Review/Update Placement information 4. Review/Update case information 5. Request approval	6. Automated verification of services provided to selected case plan 7. Automated cancellation of future court hearings (when placement is terminated) 8. Automated recall of warrant 9. Automated Worker notification to cancel the RAP Back Notifications 10. Automated case deactivation (when all deactivation criteria has been met)
Case Management	Service/Case Plan	UC116 - Perform Life Skills Assessment	1. Find youth/young adult in the TILP 2. Create/Update the Life Skills Assessment information	3. Automated Worker notification that a youth is eligible for Independent Living Skills Services 4. Automated Worker notification to complete the Life Skill Assessment 5. Automated population of Life Skill Assessment information
Case Management	Service/Case Plan	UC018 - Initiate Placement	1. Review the child's placement needs 2. Review Strengths and Needs assessment information 3. Update placement specific needs of the child 4. Locate potential non-relative extended family members (NREFM) for placement 5. Initiate ICPC placement for out-of-state (NREFM) interested in placement of the child 6. Initiate Caregiver Application for in-state (NREFM) interested in placement of the child 7. Initiate non-NREFM placement 8. Determine best placement for the child 9. Search system for caregiver candidates for placement 10. Create new caregiver in the system	11. Automated Worker notification of relative/NREFM assessment completion 12. Automated Worker notification when a new (sponsored) caregiver application has been entered into the system

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC019 - Perform Placement Matching	<ol style="list-style-type: none"> 1. Initiate placement match 2. Review/Update placement match criteria 3. Initiate placement 4. Initiate out-of-state ICPC placement 5. Refer the child(ren) for publication when an acceptable caregiver is not available 	<ol style="list-style-type: none"> 6. Automated population of child(ren) placement needs with placement match criteria 7. Automated search for licensed and approved adoptive caregiver homes 8. Automated storage of the placement match results for a specified period of time 9. Automated notification of historical caregiver concerns
Case Management	Service/Case Plan	UC020 - Make Placement	<ol style="list-style-type: none"> 1. Contact the relative/NREFM caregiver to ensure their willingness to accept a placement 2. Initiate new placement match 3. Review child's history with prospective caregiver 4. Schedule court hearings 5. Review court order 6. Initiate the Adoption Assistance Program 7. Update placement information 8. Generate placement forms and placement notices 9. Create a written shared responsibility plan 10. Capture signatures (wet or electronic) on placement forms 11. Confirm and complete placement in system 12. Process adoptive placement 13. Process out-of-state placement 14. Review/Update placement termination (end) information 15. Notify receiving state that an inactive placement was an outgoing ICPC 	<ol style="list-style-type: none"> 16. Automated Worker notification of received court order 17. Automated update of pending placement to placed in the caregiver's home 18. Automated Worker notification to apply or change Benefits for the child 19. Automated calculation of the end date and time of an active placement 20. Automate notification to Eligibility Worker that there has been a change in placement status

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC021 - Process Incoming ICPC Requests	<ol style="list-style-type: none"> 1. Validate the ICPC request is complete 2. Record a new incoming ICPC Case 3. Review/Update the incoming ICPC request 4. Refer the ICPC request to a CWS Worker to conduct the home study 5. Complete the ICPC 100A information with the receiving state's recommendation 	<ol style="list-style-type: none"> 6. Automated data extraction from forms 7. Automated association of extracted data to the incoming ICPC case 8. Automated determination of the due date for the incoming ICPC Home Study request 9. Automated Worker notification when the requested home study is completed 10. Automated population of the ICPC100A form with the required home study results
Case Management	Service/Case Plan	UC022 - Monitor Incoming ICPC Placements	<ol style="list-style-type: none"> 1. Review assigned cases and tasks 2. Review incoming ICPC placement case information 3. Verify service delivery 4. Complete the ICPC progress report 5. Review the ICPC progress report 	<ol style="list-style-type: none"> 6. Automated Worker notification that an incoming ICPC placement case has been assigned to their caseload 7. Automated determination of contact due date 8. Automated determination of ICPC progress report due date 9. Automated Worker notification that an ICPC progress report is ready to be sent
Case Management	Service/Case Plan	UC023 - Prepare Outgoing ICPC Placements	<ol style="list-style-type: none"> 1. Review child's case information 2. Complete the ICPC100A 3. Review/Update the outgoing ICPC case information 4. Generate supporting ICPC documentation 5. Review received ICPC 100A and completed home study 6. Record placement decision 7. Provide the Court with the outgoing ICPC home study and the placement decision 	<ol style="list-style-type: none"> 8. Automated population of ICPC case information 9. Automated Worker notification of the outgoing ICPC packet completion 10. Automated notification to the Worker that an ICPC packet is pending 11. Automated assignment of the outgoing ICPC case to a Worker 12. Automated Worker notification that outgoing ICPC information is ready for review

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC024 - Perform Guardianship Home Study	<ol style="list-style-type: none"> 1. Search for a child 2. Review child's case information 3. Initiate a guardianship home study 4. Schedule a meeting with the caregiver(s) 5. Contact the child's Indian tribe if the child meets the criteria within the Indian Child Welfare Act 6. Initiate criminal background check for caregiver(s) 7. Complete the guardianship home study 8. Review/Update caregiver information 9. Validate all activities for the guardianship home study have been completed 10. Record the outcome of the Case staffing 11. Generate the completed guardianship home study document 12. Provide the guardianship home study information to the Court 	<ol style="list-style-type: none"> 13. Automated Worker notification of Court ordered guardianship home study 14. Automated Worker notification incoming ICPC request assignment 15. Automated creation of list of activities to complete the guardianship home study 16. Automated Worker notification if the caregiver(s) have a current background check recorded in the system
Case Management	Service/Case Plan	UC115 - Prepare Outgoing ICPC Placements Group Home	<ol style="list-style-type: none"> 1. Review child's case information 2. Review child's Case placement needs assessment information 3. Complete the request to place a child in an out of state group home 4. Generate the outgoing ICPC group home request documentation 5. Schedule a multidisciplinary meeting 6. Record the outcome of the multidisciplinary meeting 7. Update the placement recommendation 8. Set a hearing and prepare the documentation for Court 9. Review a court order 10. Review/Update Interstate Compact Placement Request (ICPC100A) 11. Generate supporting Interstate Compact Placement Request (ICPC100A) documents 12. Capture placement decision 13. Review/Update an ICPC 100B 	<ol style="list-style-type: none"> 14. Automated Worker notification that a Court order has been received 15. Automated population of Interstate Compact Placement Request (ICPC100A) 16. Automated outgoing ICPC packet assignment to Worker 17. Automated Worker notification of outgoing ICPC packet assignment 18. Automated Worker notification of an ICPC placement decision 19. Automated population of the Interstate Compact Placement Request (ICPC 100B) 20. Automated assignment of the Interstate Compact Placement Request (ICPC 100B) to a Worker 21. Automated Worker notification of an Interstate Compact Placement Request (ICPC 100B) assignment

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC027 - Perform Relinquishment of Child	<ol style="list-style-type: none"> 1. Review a Relinquishment of Child task 2. Associate child with the relinquishment 3. Associate relinquishing parent with the relinquishment 4. Search for the relinquishing parent 5. Review/Update relinquishing parent information 6. Create a case 7. Review/Update case information 8. Record contact information 9. Review/Update parental information (legal claim to the child and their legal status) 10. Terminate the relinquishment process 11. Request services and goods 12. Determine if a Permanency Planning/Adoptability Assessment has been completed 13. Review/Update relinquishment 14. Complete the relinquishment 15. Request approval 16. Schedule a court hearing to request orders giving the agency the right to custody and control of the child 17. Capture parent signature on Voluntary Placement Agreement (SOC 155) 18. Request a copy of a deceased parent death certificate(s) from the Electronic Death Registration System 	<ol style="list-style-type: none"> 19. Automated Worker notification of Relinquishment of Child task assignment 20. Automated population of case information 21. Automated population of relinquishment information 22. Automated Worker notification that Permanency Planning/Adoptability Assessment has been completed 23. Automated Worker notification of response to Court Calendar Event request 24. Automated Worker notification that the Order to Publish time period has elapsed 25. Automated Worker notification of receipt of death certificate

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC028 - Perform Rescission of Adoption Relinquishment	<ol style="list-style-type: none"> 1. Review the assigned Rescission of Adoption Relinquishment tasks 2. Perform Revocation of Adoption Relinquishment 3. Terminate all adoption planning 4. Schedule a contact with the relinquishing parent 5. Determine if the Rescission of Adoption Relinquishment is in the best interest of the child 6. Review/Update Rescission of Adoption Relinquishment information 7. Review case information 8. Request approval 9. Submit a Suspected Child Abuse Report for at risk child 10. Schedule the return of the child 11. Document the child has been returned to the parent 12. End adoption case task 13. Notify relinquishing parent of decision not to place child(ren) with their designated person 14. Notify court and attorneys of decision not to place child(ren) with their designated person 	<ol style="list-style-type: none"> 15. Automated Worker notification of Rescission of Adoption Relinquishment task assignment 16. Automated Worker notification that form AD508 was not returned by the specified date 17. Automated Worker notification of the decision to rescind the relinquishment 18. Automated population of the Rescission of Adoption Relinquishment task information 19. Automated Worker notification that the agency has approved a parent's request to rescind the relinquishment of their child 20. Automated Worker notification that the child is either detained or a juvenile court dependent in out-of-home care
Case Management	Service/Case Plan	UC029 - Perform Revocation of Adoption Relinquishment	<ol style="list-style-type: none"> 1. Review assigned Revocation of Relinquishment tasks 2. Notify parent of finalization of adoption 3. Terminate all Adoptive planning for the child after state acknowledged of the Adoption 4. Schedule a contact with the relinquishing parent 5. Update all relinquishment documents "VOID" after the relinquishment has been revoked 6. Review/Update case information 7. Submit a Suspected Child Abuse Report for at risk child 8. Initiate court proceedings to determine 	<ol style="list-style-type: none"> 11. Automated Worker notification of Revocation of Relinquishment task assignment 12. Automated Worker notification that form AD508 was not returned by the specified date 13. Automated population of the Revocation of Relinquishment task information 14. Automated population of case information 15. Automated Worker notification that form AD4317 has not been completed by the specified date 16. Automated Worker notification that child needs to be returned to the parent from voluntary Placement

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
			custody 9. Schedule a custody hearing 10. Schedule return of child to parent	
Case Management	Service/Case Plan	UC030 - Perform Permanency Planning/Adoptability	1. Review Permanency Planning/Adoptability (PPA) assessment task 2. Review the PPA assessment 3. Review/update the child's service needs 4. Request additional records 5. Review/Update the Adoption Assistance Program checklist and answer the AAP criteria questions 6. Interview/Record child feelings on adoption and preferences in an adoptive family 7. Record child declined adoption 8. Schedule/conduct an interview with the current caregiver 9. Schedule/conduct an interview with Relative/NREFM 10. Record adoption recommendation 11. Request approval	12. Automated Worker notification of Permanency Planning/Adoptability (PPA) assessment task assignment 13. Automated population of case information into the PPA assessment 14. Automated determination/listing of required assessment tasks

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC031 - Conduct Adoption Home Study	<ol style="list-style-type: none"> 1. Review Adoption Home Study information 2. Create required release form(s) 3. Create letter requesting missing information 4. Schedule and conduct in-home interview(s) 5. Request background check(s) on applicable household members 6. Schedule and conduct a safety assessment of the applicant's home 7. Review/update home study results 8. Execute a home study 9. Review completeness of the home study 10. Document recommendation to approve or deny the adoptive home application 11. Complete the Family Available information 12. Request approval 13. Request services or goods to remove concerns from home study results 14. Notify Adoptive Applicant of application decision 15. Process Adoptive Applicant request to withdraw their application 	<ol style="list-style-type: none"> 16. Automated Adoption Home Study task assignment 17. Automated Worker notification of Adoption Home Study task assignment 18. Automated population of the Adoption Home Study information 19. Automated determination of required Adoption Home Study tasks
Case Management	Service/Case Plan	UC032 - Provide Post-Placement Supervision	<ol style="list-style-type: none"> 1. Review/update Post-placement Supervision tasks 2. Create Post-placement Supervision waiver 3. Request waiver approval 4. Determine/record number of visits required for Adoptive Placement 5. Request services and goods 6. Review case information 7. Submit Suspected Child Abuse Report for at-risk child 8. Process Adoptive Caregivers wish to change their legal relationship with the child to Legal Guardianship 	<ol style="list-style-type: none"> 9. Automated Worker Post-placement Supervision task assignment 10. Automated Worker notification of Post-placement Supervision task assignment 11. Automated population of Post-placement Supervision information 12. Automated determination of required Post-placement Supervision tasks to be completed 13. Automated adjustment of supervision period based on waiver(s) 14. Automated Worker notification when the Post-placement Supervision time period has elapsed

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC033 - Provide Post-Adoption Services	<ol style="list-style-type: none"> 1. Review Post Adoption Services 2. Determine type of Post Adoption services being requested 3. Review case information 4. Provide applicant with required forms to collect information 5. Determine the tasks to be conducted to provide the requested services 6. Request additional services/extension of additional services 7. Schedule and conduct meeting 8. Request approval 9. Monitor progress of approved continued placement 10. Determine the type of reunion services being requested 11. Review submitted AD 904 form(s) 12. Review the Consent for Contact and indicate relatives consenting to a reunion 13. Generate letter disclosing contact information for relatives consenting to a reunion 14. Review background information 	<ol style="list-style-type: none"> 15. Automated population of case information 16. Automated population of Post Adoption Services information 17. Automated determination of tasks required to provide the requested additional services 18. Automated Worker notification of additional service(s) with time limit(s) set to expire 19. Automated population of Reunion Services information 20. Automated Worker notification that received AD904 will allow a reunion 21. Automated population of Reunion Services task(s) 22. Automated determination/listing of required background information tasks to be completed

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC034 - Finalize Adoption	<ol style="list-style-type: none"> 1. Schedule contact with family to discuss finalization plans 2. Review the finalize adoption task information 3. Prepare Final Adoption Court Report 4. Request approval 5. Manage adoptive family Non-recurring Expense submitted receipts 6. Review/Update Adoption Fee Waiver information 7. Review Adoption Fee Invoice 8. Request approval 9. Review the 42R Agency Adoption Program – Individual Case Report 10. Review Finalize Adoption task information 	<ol style="list-style-type: none"> 11. Automated Worker notification to Finalize Adoption based on petition to adopt notification from a court 12. Automated population of AD 824 Consent and Joinder task information 13. Automated population of Court Report of Adoption – Vital Statistics 44 Task information 14. Automated population of Final Adoption Court Report 15. Automated Worker notification that the Final Adoption Documents have been filed with the court 16. Automated population of Non-recurring Expense Task information 17. Automated population of Adoption Fee Invoice task information 18. Automated distribution of approved forms to the Adoptive Caregiver(s) 19. Automated Worker notification when an Order of Adoption is received from the court 20. Automated assignment of a Termination of Dependency task(s) to the Adoption Worker 21. Automated Worker notification of a Termination of Dependency task(s) 22. Automated Worker notification of Termination of Dependency JV-364 receipt from the court 23. Automated Worker notification of incomplete task information 24. Automated population of 42R Agency Adoption Program – Individual Case Report information 25. Automated population of Finalize Adoption information

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Service/Case Plan	UC035 - Vacate Adoption	<ol style="list-style-type: none"> 1. Review Vacate Adoption task assignment information 2. Review/update the Vacate Adoption petition to vacate adoption order and case history 3. Record the Adoption is under investigation for petition to vacate an adoption order 4. Assign the investigation to a CDSS Adoption District Office 5. Review the notice of petition to vacate an adoption order 6. Assign the case to a District Office Worker 7. Request paper files associated with an adoption case 8. Schedule meetings with agency workers/family involved in the case 9. Review court findings 	<ol style="list-style-type: none"> 10. Automated Worker notification that a notice of petition to vacate an adoption order has been received 11. Automated Worker notification of a new Vacate Adoption task assignment 12. Automated District Office assignment recommendation 13. Automated District Office notification of a new Vacate Adoption task assignment 14. Automated District Office Worker notification of a Vacate Adoption task assignment 15. Automated population of Vacate Adoption task assignment information 16. Automated Worker notification that a case outcome has been received from the family and juvenile courts
Case Management	Service/Case Plan	UC097 - Freeing of Child and State Acknowledgement	<ol style="list-style-type: none"> 1. Review Freeing and Acknowledgement task information 2. Review Parental Information 3. Identify all parents who have potential legal claim to the child and their legal status 4. Determine parent whereabouts (or if deceased) 5. Determine if parental rights have been terminated 6. Contact parent with parental rights 7. Review Custody and Control information 8. Request approval 9. Review the Freeing and Acknowledgement package 10. Identify missing Freeing and Acknowledgement package information 11. Request death certificate for parent that died outside California 12. Request orders giving the agency the right to custody and control of the child 	<ol style="list-style-type: none"> 13. Automated notification of Freeing and Acknowledgement task assignment 14. Automated population of Parental Information 15. Automated population of Custody and Control information 16. Automated submission of the Freeing and Acknowledgement package to the CDSS Adoption Support Unit 17. Automated Assignment of Tasks to Caseload 18. Automated creation of the AD 4333 19. Automated Worker notification of available/assigned AD4333 20. Automated Worker notification when a Death Certificate is received

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Case Review/Evaluation	UC085 - Plan and Record Contacts	<ol style="list-style-type: none"> 1. Create a contact 2. Schedule a meeting 3. Create or update documents 4. Conduct a virtual meeting 5. Document meeting activities, outcome and/or recommendations 6. Capture/Associate hard copy information to the meeting contact 7. Manage follow-up or recurring meeting(s) 8. Include additional staff in contact 9. Include community partner in a contact 10. Create meeting notices for system external distribution 11. Attach documentation to a scheduled meeting 12. Create a virtual meeting 	13. Automated notification(s) of a scheduled meeting
Case Management	Monitoring Service/Case Plan Services	UC025 - Maintain a Person	<ol style="list-style-type: none"> 1. Create a person 2. Review person information 3. Manage function information for the person 4. Manage demographic information for the person 5. Manage health information for the person 6. Manage relationship information for the person 7. Manage education information for the person 8. Manage tribal affiliation and Indian ancestry information for the person 9. Manage legal status information for the person 10. Manage criminal history information for the person 	<ol style="list-style-type: none"> 11. Automated population of person information 12. Automated verification/validation of person address information

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Monitoring Service/Case Plan Services	UC118 - Process Missing Child	<ol style="list-style-type: none"> 1. Review child information 2. Manage child information 3. Review Contacts associated with the child's case 4. Schedule contact with child's caregiver 5. Notify law enforcement to file a missing person report and/or obtain a copy of the report 6. Attempt to locate the child (contact known friends, relatives or associations) 7. Request a protective custody warrant from the court 8. Provide appropriate notification of court outcome(s) associated with missing child case 9. Manage Benefit and Placement decisions 10. Terminated missing child's placement (when appropriate) 11. Prepare and calendar a request to terminate dependency and recall the protective custody warrant (for age of majority) 	<ol style="list-style-type: none"> 12. Automated Worker notification of missing child 13. Automated assignment of missing child to Worker caseload 14. Automated Worker notification of missing child task assignment 15. Automated Worker notification of court outcome
Case Management	Monitoring Service/Case Plan Services	UC014 - Request for Services and Goods	<ol style="list-style-type: none"> 1. Verify the delivery of services and/or goods 2. Modify request for services or goods 3. Review list of assigned child(ren), adult(s), family member(s), or caregiver(s) needing services or goods 4. Search for services and goods 5. Review service and good items within proximity of the desired recipient location. 6. Review Service Providers for each service or good that is within proximity of the desired recipient location 7. Add a New Service and/or Provider 8. Request services and goods 9. Execute a referral for services and goods 10. Request approval or authorization 11. Request a purchase order (when applicable) 	<ol style="list-style-type: none"> 12. Automated listing of service and good items within proximity of the desired recipient location 13. Automated listing of Service Providers for each service or good within proximity of the desired recipient location 14. Automated verification of the availability of the number of units of services and goods being requested 15. Automated adjustment of the number of units requested to the number available 16. Automated reservation (place on hold) of the units requested

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Monitoring Service/Case Plan Services	UC015 - Referral for Services and Goods	<ol style="list-style-type: none"> 1. Review completed requests for Services and Goods for assigned clients 2. Initiate Services and/or Goods referral process 3. Manage Services and/or Goods referral information 4. Provide information and instructions to the recipient on how to attend and/or obtain the services 5. Notify Service Provider of referral for Services and/or Goods and provide attachments 6. Notify Service Provider of the start date of services 7. Notify recipient of the start date of services 8. Obtain a signed Release of Information from the service recipients 9. Manage contact information 	10. Automated capture of the date the Services, Voucher or Goods are issued
Case Management	Monitoring Service/Case Plan Services	UC016 - Verify Delivery of Services and Goods	<ol style="list-style-type: none"> 1. Review referral for Services and Goods information 2. Identify referrals for Services and Goods that have not been verified 3. Manage Services and Goods request information 4. Verify delivery of Services and Goods with Client recipient(s) 5. Verify delivery of Services and Goods with Service Provider(s) 6. Provide information and instructions to the recipient on how to attend or obtain the services 	<ol style="list-style-type: none"> 7. Automated listing of referrals for Services and Goods that have not been verified 8. Automated Financial Management/Resource Management notification of delivery of services and/or goods 9. Automated generation of notification for the recipient on how to attend or obtain Services or Goods 10. Automated adjustment(s) to the Available Units and Allocated Units in inventory
Case Management	Monitoring Service/Case Plan Services	UC017 - Service Provider Online Progress Report		

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Case Management	Monitoring Service/Case Plan Services	UC114 - Apply for Child's Income	<ol style="list-style-type: none"> 1. Determine if child is eligible for benefits 2. Initiate application for benefits 3. Manage benefits information 4. Determine if child has Social Security Card or Number 5. Initiate application for a Social Security Card 6. Initiate a county Payee Request 7. Manage Payee Request information 8. Initiate request for the county to become the child's payee 9. Submit Payee Request to the Social Security Administration or Veterans Administration 10. Initiate Benefit Application 11. Consult with child/family on Payee or Benefit application denial 12. Initiate appeal for denied Payee or Benefit application 	<ol style="list-style-type: none"> 13. Automated Worker notification when child has active income 14. Automated population of benefits information
Resource Management	Facilities Support	UC049 - Recruitment of New Caregivers		
Resource Management	Facilities Support	UC051 - Process Caregiver Application	<ol style="list-style-type: none"> 1. Review Caregiver Application 2. Manage Caregiver information 3. Review Caregiver background check 4. Notify Caregiver applicant of denied application and grievance rights 5. Request county optional approval 6. Initiate Adoption Home Study 7. Schedule a contact 8. Initiate/monitor a Corrective Action Plan 9. Initiate request for any authorized services and supports available to caregivers 10. Notify applicant of missing or incomplete application documentation 	<ol style="list-style-type: none"> 11. Automated assignment of caregiver application to Worker
Resource Management	Facilities Support	UC058 - Maintain Agency	<ol style="list-style-type: none"> 1. Search for an Agency 2. Manage Agency information 	

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Resource Management	Facilities Support	UC059 - Maintain Inventory	1. Search for Inventory 2. Manage Inventory information 3. Search for a Inventory contents 4. Manage Inventory contents information	
Resource Management	Facilities Support	UC061 - Maintain Attorneys	1. Search for an Attorney 2. Manage Attorney information	
Resource Management	Facilities Support	UC062 - Maintain State ICPC Administrator	1. Search for an ICPC Liaison 2. Manage ICPC Liaison information	
Resource Management	Facilities Support	UC063 - Maintain Tribal Directory	1. Search for Tribal Directory Information 2. Manage Tribal Directory information	
Resource Management	Facilities Support	UC064 - Maintain Password for Service Provider		
Resource Management	Facilities Support	UC065 - Service Provider Online Enrollment		
Resource Management	Facilities Support	UC066 - Home Study Provider Report Online		
Resource Management	Facilities Support	UC103 - Maintain Goods and Services	1. Search for a Good or Service 2. Manage Good or Service information	
Resource Management	Foster/Adoptive Homes Support	UC053 - Investigate Complaint Against Foster Home		
Resource Management	Foster/Adoptive Homes Support	UC054 - Initiate Progressive Discipline		

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Resource Management	Foster/Adoptive Homes Support	UC121 - Maintain Caregiver	<ol style="list-style-type: none"> 1. Review caregiver information 2. Manage caregiver information 3. Schedule a contact 4. Manage compliance actions related to the home and household members 5. Request approval 6. Investigate complaint against a caregiver 7. Notify caregiver of results from investigation of complaint 8. Initiate/monitor a Corrective Action Plan 9. Initiate request for any authorized services and supports available to caregivers 	<ol style="list-style-type: none"> 10. Automated Worker notification that a caregiver re-evaluation or reassessment is due 11. Automated Worker notification of a violation or corrective action plan against a caregiver's home where their case child(ren) are currently placed
Resource Management	Resource Directory	UC056 - Maintain Service Provider	<ol style="list-style-type: none"> 1. Search for a Service Provider 2. Manage Service Provider information 3. Search for a Service 4. Manage Service information 	
Resource Management	Contract Support			
Court Processing	Court Documents	UC038 - Prepare Court Documentation	<ol style="list-style-type: none"> 1. Review Case information 2. Manage Case information 3. Review Safety Risk Assessment (SRA) information 4. Manage Safety Risk Assessment (SRA) Information 5. Review case plan 6. Manage case plan 7. Review delivered services information 8. Manage delivered services information 9. Request approval 10. Process received JV220 and JV 220(A) forms 	<ol style="list-style-type: none"> 11. Automated Worker notification that court documentation is needed 12. Automated population of court reports 13. Automated generation of Findings and Orders listing based on the Hearing Type 14. Automated Worker notification that an Ex Parte hearing or action has been calendared

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Court Processing	Notifications	UC117 - Prepare Court Notice	<ol style="list-style-type: none"> 1. Initiate a Court Notice 2. Identify participants entitled to notice of a hearing 3. Manage hearing participant information 4. Manage Return Receipt Certified Certificate 5. Provide Court with Court Notice and Proof of Service Information 6. Initiate due diligence search 	<ol style="list-style-type: none"> 7. Automated identification of the participants entitled to notice of a hearing and their contact information 8. Automated Worker notification that a court notice/notices need to be sent for a hearing 9. Automated population of a court notice 10. Automated population of an ICWA notice 11. Automated generation of a Return Receipt Certified Certificate 12. Automated generation of proof of service for all identified participants for a hearing 13. Automated Worker notification of a calendared 366.26 hearing
Court Processing	Tracking	UC037 - Request or Schedule Court Calendar Event	<ol style="list-style-type: none"> 1. Initiate a request to schedule a Court Calendar Event 2. Manage Court Calendar Event information 3. Request Court Calendar Event 	<ol style="list-style-type: none"> 4. Automated verification that all Court Calendar event information has been entered 5. Automated Worker notification of hearing/trial date 6. Automated Client Court information update to Worker calendar 7. Automated Worker notification of court notices that need to be sent based on Hearing Type 8. Automated Worker notification that Court Documentation has been transferred to the court
Court Processing	Tracking	UC039 - Perform Due Diligence Search	<ol style="list-style-type: none"> 1. Initiate a due diligence search 2. Review due diligence search information 3. Validate person located is the person desired from the search 4. Manage due diligence information 5. Manage person information 6. Capture electronic signature(s) 	<ol style="list-style-type: none"> 7. Automated recording of all sources included in the due diligence search, with the date contacted, date of response, and result of search 8. Automated Worker notification of completed due diligence search 9. Automated generation of Due Diligence documentation

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Court Processing	Tracking	UC040 - Process Court Event Outcome	<ol style="list-style-type: none"> 1. Review Hearing Outcome Information 2. Request clarification or update from the Juvenile Court to resolve discrepancies in Minute Order 3. Review Court use of recommended Findings and Orders 4. Review appeal information 	<ol style="list-style-type: none"> 5. Automated Worker notifications of court events 6. Automated County Counsel notification of Appeal Notification
Court Processing	Indian Child Welfare Act			
Financial Management	Accounts Payable	UC078 - Process a Purchase	<ol style="list-style-type: none"> 1. Review Purchase Request information 2. Request check from Finance (via payment instructions) when required for purchase 3. Request purchase order (when required for purchase) 4. Request a cash disbursement 5. Request Voucher/Inventory goods 6. Manage Voucher/Inventory information 7. Identify Service Provider to whom a contract will be issued 8. Manage contract information 	<ol style="list-style-type: none"> 9. Automated determination if purchase request should be on hold (based on available funds) 10. Automated determination of the date for the purchase request re-submission 11. Automated Worker notification that purchase request has been placed on hold 12. Automated encumbrance of funds and identification of the Funding Source 13. Automated generation of Purchase Order 14. Automated generation of Procurement Request 15. Automated requesting party notification when Purchase Order is complete (available for printing) 16. Automated Worker notification that Voucher/Inventory goods are available for pickup 17. Automated Worker notification that cash disbursement is available

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Financial Management	Accounts Payable	UC080 - Process Financial Instructions		<ol style="list-style-type: none"> 1. Automated determination if a payment is required 2. Automated determination if a notice is required 3. Automated acquisition of eligibility payment data for the notice of action 4. Automated determination if other financial instructions are required 5. Automated acquisition of other financial instructions data 6. Automated generation of the financial instructions 7. Automated amendment to financial instructions in a previously processed claim 8. Automated distribution of notice and payment instructions to the State and County payment Systems
Financial Management	Accounts Receivable	UC077 - Process Invoice	<ol style="list-style-type: none"> 1. Search for an Authorization Number 2. Manage Authorization Number 3. Review Invoice information 4. Manage Invoice information 5. Manage receipt information 6. Manage Service Provider Information 7. Verify Service Provider authority under contract to provide a specific Service or Goods 8. Verify delivery of Services or Goods 9. Notify Service Provider of corrections to/rejection of submitted invoice(s) 10. Request authorization for payment or rejection of payment 	<ol style="list-style-type: none"> 11. Automated population of Invoice information 12. Automated application of Claims Adjudication rules to managed Invoice information 13. Automated determination if there is a case or Referral in the system associated to the Invoice 14. Automated payment instruction issue to the County and/or State payment system

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Financial Management	Accounts Receivable	UC079 - Process Warrant or Voucher Replacement	<ol style="list-style-type: none"> 1. Search for a Warrant/Voucher (based on an Authorization Number) 2. Review Warrant/Voucher information 3. Manage Warrant/Voucher information 4. Provide Replacement paperwork to the payee 5. Initiate referral to Fraud for Investigation 6. Request approval to Stop Payment on a Warrant/Voucher 	<ol style="list-style-type: none"> 7. Automated generation of Warrant/Voucher replacement paperwork 8. Automated determination if a Warrant/Voucher was cashed or redeemed 9. Automated Worker notification of denied approval to Stop Payment 10. Automated issue of instructions to the County/State payment system to stop payment 11. Automated provision of Warrant or Voucher Number and all pertinent information to the County Fraud Investigation department/unit
Financial Management	Claims	UC081 - Perform Reconciliation	<ol style="list-style-type: none"> 1. Manage abatement information 2. Manage overpayment/underpayment results/information 	<ol style="list-style-type: none"> 3. Automated processing of data received from SAWS 4. Automated comparison of the warrant information to the payment instructions 5. Automated determination that an overpayment/underpayment has occurred 6. Automated generation/distribution of an overpayment notice and repayment options 7. Automated generation of an Exception Report indicating the payments that have discrepancies 8. Automated Worker notification of discrepancies in payment information 9. Automated caregiver/service provider notification when reported overpayment/underpayment was correct as per issued payment
Administration	Staff Management	UC067 - Access CWS WEB	<ol style="list-style-type: none"> 1. Initiate internal user log-in 2. Initiate external user log-in to Self Service 	<ol style="list-style-type: none"> 3. Automated validation of user log-in information 4. Automated user notification of invalid log-in information

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Administration	Staff Management	UC068 - Perform Administration Management	1. Manage the Administrative Organization 2. Manage employee information 3. Manage User information 4. Manage role information 5. Manage system task information 6. Manage caseload information	
Administration	Staff Management	UC069 - Maintain Administration Organization	1. Search for Administrative Organization information 2. Manage Administrative Organization information	
Administration	Staff Management	UC070 - Maintain Employee	1. Search for Employee information 2. Manage Employee information	3. Automated capture (auditing) of the submitter and the date the changes were saved in the system
Administration	Staff Management	UC071 - Maintain Users	1. Search for User information 2. Manage User information	3. Automated capture (auditing) of the submitter and the date the changes were saved in the system
Administration	Staff Management	UC072 - Maintain Roles	1. Search for Role information 2. Manage Role information	3. Automated capture (auditing) of the submitter and the date the changes were saved in the system
Administration	Staff Management	UC073 - Maintain System Tasks	1. Search for Task information 2. Manage Task information	3. Automated capture (auditing) of the submitter and the date the changes were saved in the system
Administration	Staff Management	UC074 - Assign Tasks to Caseload	1. Review the Referral and/or case information 2. Review the Best Caseload Match 3. Request approval 4. Review referral, case, or task assignment 5. Manage referral, case, or task assignment	6. Automated assignment of a Referral(s), case(s), or task(s) to a Worker caseload 7. Automated Worker notification to assign a Referral(s), case(s), or task(s) to a caseload 8. Automated approver notification of pending approval request 9. Automated Worker notification of new Referral(s), case(s), or task(s) assignment(s) 10. Automated Supervisor notification when Referral, case, or task assignment is not viewed within a predetermined period of time 11. Automated request to suspense/storage for referral or case hardcopy files to be forwarded to the assigned worker, office, or unit

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Administration	Staff Management	UC075 - Internal User Maintains Password	<ol style="list-style-type: none"> 1. Manage personal password information 2. Initiate password update when password is forgotten 3. Initiate password reset when locked out of the system 	<ol style="list-style-type: none"> 4. Automated user notification that it is time to change their password (during system log-in) 5. Automated validation that requesting party is owner of password being changed 6. Automated validation of provided password information 7. Automated update of correct password information 8. Automated Administrator notification to reset user password (user locked out of the system) 9. Automated user notification after password reset
Administration	Staff Management	UC076 - Perform Workflow Processing		<ol style="list-style-type: none"> 1. Automated task execution within the system 2. Automated task generation for a User 3. Automated task assignment to a User 4. Automated User notification of task assignment 5. Automated generation of Worker reminder(s), alert(s) or notification(s)
Administration	Staff Management	UC099 - Maintain Caseload	<ol style="list-style-type: none"> 1. Search for Caseload information 2. Manage Caseload information 	<ol style="list-style-type: none"> 3. Automated capture (auditing) of the submitter and the date the changes were saved in the system
Administration	Staff Management	UC100 - Provide Best Caseload Match	<ol style="list-style-type: none"> 1. Search for caseload(s) 2. Review caseload information 3. Determine best caseload match 4. Manage caseload information 	<ol style="list-style-type: none"> 5. Automated generation of prioritized range of best caseload match(s) (identifies potential Workers and their caseloads)
Administration	Reporting			

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Administration	Administrative Support	UC119 - Create and Manage Self-Service Account	<ol style="list-style-type: none"> 1. Create a self-service account for a person 2. Create a self-service account for an entity 3. Identify a person responsible for the entity (so the entity self-service account can be created like the person account) 4. Responsible entity person creates additional persons associated with the entity 5. User maintenance of password 6. User maintenance of personal profile 7. Responsible user maintenance of entity profile/associated persons 	<ol style="list-style-type: none"> 8. Automated system generation of self-service person (account holder) profile 9. Automated system assignment of role to self-service person 10. Automated system generation of password for self-service person 11. Automated system notification to person of newly created self-service account 12. Automated system notification of password expiration (periodic reset)
Administration	Administrative Support	UC120 - Self Service Access	<ol style="list-style-type: none"> 1. User log-on to self-service 2. New user request/creation of account 3. Mandatory Reporter submission of online SCAR (Suspected Child Abuse Report) 4. User maintenance of self-service profiles and passwords 	<ol style="list-style-type: none"> 5. Automated system presentation of viewable content and options (including information/destination links) appropriate for the active self-service account (role-based) 6. Automated system association between a youth and a caregiver/service provider for the purpose of tracking the association 7. Automated system notification to the youth's Case/Referral worker of the creation of a youth to caregiver/service provider association 8. Automated system notification to the youth's caregiver of the creation of a youth to caregiver/service provider association 9. Automated system notification to the youth's caregiver of termination of the youth to caregiver/service provider association 10. Automated system notification to the caregiver/service provider when information updates have not been performed (or identified as complete) within a configurable time period 11. Automated system deactivation of the youth to caregiver/service provider association when updates are not performed within the defined time period

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Interfaces	Required Interfaces			
Interfaces	Optional Interfaces			
Quality Assurance	Quality Assurance	UC095 - Perform Review	1. Determine the case(s)/Referral(s) to be reviewed and timeframe for review 2. Determine the level/type of review 3. Generate the Review or Audit report in the system 4. Initiate Case Management Services Review 5. Initiate Case Management Adoption Review 6. Initiate Case Planning Review 7. Initiate Intake Management Review 8. Initiate Resource Management Licensing Review 9. Initiate Court Processing Review 10. Initiate Federal Reporting Review 11. Initiate Eligibility Review 12. Initiate Financial Management Review 13. Initiate Assessment Review 14. Initiate Title IV-E Audit 15. Initiate General Capabilities Review 16. Initiate Placement Review	17. Automated generation of the Review or Audit report (information/data provided is dependent on the review/audit being conducted, and is pre-defined for that review/audit)
Quality Assurance	Quality Assurance	UC096 - Perform Dashboard Activities		
Additional Functionality	Additional Functions	UC083 - Perform a Search	1. Initiate a search of data elements within the system and/or an external system with a defined interface 2. Provide search criteria 3. Review suggested external systems to include in the search/verification 4. Manage suggested external systems to include in the search/verification 5. Navigate away from (drill down or review an individual search result item) 6. Return to a search result set (after navigation) and receive indication of previously	22. Automated background search as data is being entered (Google-like keyword/topic matching) 23. Automated suggestion of external systems to include in the search/verification criteria 24. Automated execution of search request based on provided information and associated business rules 25. Automated Worker notification when search has completed or returned results 26. Automated provision of search results to user

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
			<p>reviewed item(s)</p> <p>7. Initiate a search (during Intake) to determine previous CWS contact with the child and/or parents for allegations of child abuse or neglect</p> <p>8. Initiate a search for an entity, resource, or collateral within the system</p> <p>9. Initiate a search for a person within the system or an interfacing agency</p> <p>10. External user initiated search to locate a Worker within the system</p> <p>11. Initiate a search for and/or validate an address within the system</p> <p>12. Initiate a search by a person's name, address or vehicle license number (DMV search)</p> <p>13. Initiate a search for a CWS resource, goods, or services</p> <p>14. Initiate a search for non-CWS sponsored resources</p> <p>15. Initiate a search for a missing person</p> <p>16. Initiate a search for a system form, report or document</p> <p>17. Initiate a search of a catalog/registry within the system</p> <p>18. Review search results</p> <p>19. Sort/reorder search results</p> <p>20. Manage search results [this can result in discard, update(s), drill-down search(s), validation]</p> <p>21. Search SAWS/LRS system for possible matching person(s) receiving aid and/or services</p>	<p>27. Automated matching of search result data to existing system data (when appropriate or requested in the workflow)</p> <p>28. Automated notification of matching or unmatched search data (when appropriate or requested in the workflow)</p> <p>29. Automated exclusion or indication of previously excluded search results</p> <p>30. Automated population of search results into form/page initiating the search</p> <p>31. Automated management of search submitted to an external system(s) (submission tracking, receipt verification and results processing)</p>

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Additional Functionality	Additional Functions	UC084 - Approve or Authorize Request	<ol style="list-style-type: none"> 1. Worker request Supervisor/Manager approval 2. Worker manage approval request information 3. Supervisor/Manager review of individual approval request(s) 4. Supervisor/Manager indication of missing information 5. Supervisor/Manager escalation to higher level for approval 6. Supervisor/Manager execution of approval/denial 	<ol style="list-style-type: none"> 7. Automated Supervisor/Manager notification of a pending approval request 8. Automated determination of Supervisor/Manager unavailability and notification of appropriate secondary Supervisor/Manager of pending approval request 9. Automated tracking of pending approval request with status managed in the client's case record 10. Automated Worker notification of approval/denial
Additional Functionality	Additional Functions	UC088 - Conduct Administrative Review Fair Hearing	<ol style="list-style-type: none"> 1. Assist complainant (at their request) in preparing and/or completing a complaint 2. Review assigned review hearing request 3. Provide DOJ with notice of complaint when complaint related to DOJ 4. Review/investigate the complaint 5. Attempt to resolve the complaint at the lowest level possible prior to escalating the matter to a review hearing by an Administrative Law Judge 6. Conclude/record a determination based on review of the complaint (deny or accept complaint) 7. Manage complaint information 8. Notify complainant of Denial of Hearing determination 9. Schedule a review hearing for accepted complaint 10. Provide complainant with Notice of Hearing and Procedures information and timeframes for review hearing 11. Record hearing decision and communicate to the appropriate authorities 12. Manage hearing information 13. Provide a supplemental report (SS 8583) to the DOJ if appropriate 	<ol style="list-style-type: none"> 15. Automated Worker assignment of received review hearing request

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
			14. Notify the complainant of the review hearing outcome and all actions required to be taken in accordance to decision	
Additional Functionality	Additional Functions	UC089 - Process and Generate Forms and Letters	1. Request creation of a form or letter 2. Determine if the document will be created inside or outside a Referral/case 3. Review a Client's case/Referral 4. Identify person(s) to receive form(s) and letter(s) (may or may not be associated to the Referral/case...create recipient outside case when appropriate) 5. Determine appropriate forms and letters to be generated 6. Manage form or letter content 7. Manage recipient information 8. Identify attachments to be associated with form(s) or letter(s) 9. Redact documents/attachments as required 10. Capture electronic signature(s) 11. Request approval 12. Determine document delivery method 13. Review ROI form, if one is related to the client 14. Manage ROI form information 15. Manage ROI form processing	16. Automated population of content of requested form(s) or letter(s) 17. Automated listing of documents available for attachment to a form(s) or letter(s) 18. Automated suggestion of information to be redacted from a form(s) or letter(s) 19. Automated provision of address information and suggested delivery methods 20. Automated Worker notification of approved document 21. Automated tracking of document(s) expected to be returned to CWS, with Worker notification of due date 22. Automated notification to internal recipients who are to receive a generated form(s) or letter(s) 23. Automated transmission of form(s) or letter(s) to the family and juvenile courts 24. Automated printing/distribution of form(s) or letter(s) 25. Automated provision of all ROI forms for a client
Additional Functionality	Additional Functions	UC090 - Receive Documents	1. Receive a document 2. Initiate a search to locate the appropriate client to associate to the document 3. Associate document with all appropriate persons in either a Referral or case 4. Review for appropriate and necessary documentation for each received document associated to a client 5. Review content of each received document 6. Review all documents associated with a client, based on Worker defined criteria	8. Automated time-stamp capture for received document 9. Automated determination if Supervisor notification is required, based on Worker entered information about received document 10. Automated Worker notification that a new document has been associated to their client

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
			7. Execute task(s) associated with a received document	
Additional Functionality	Additional Functions	UC091 - Initiate Background Check	1. Complete necessary background check request forms 2. Request approval 3. Submit a referral for person to complete the LiveScan Process within a specified time period 4. Submit background check forms to DOJ 5. Review background check results 6. Manage person information 7. Determine if the person has lived in another state 8. Manage client information based on background check information 9. Verify if the person has criminal history with other identified state criminal registries (if appropriate and possible) 10. Submit request for information to each identified state registry 11. Manage contacts with child protective services and/or law enforcement for the States with no criminal registry 12. Notify applicant when background check initiates an approval denial 13. Provide forms and directions to a person seeking an exemption to identified conviction(s)	14. Automated notification of which agencies provided results, and from which agencies results are pending 15. Automated Worker notification of contact information for each state's registry 16. Automated provision of out-of-state background check form(s) 17. Automated provision of child protective services and/or law enforcement for the States with no criminal registry

Business Segment	Function	Use Case ID/ Name	Activity	Workflow
Additional Functionality	Additional Functions	UC122 - Generate Reports	<ol style="list-style-type: none"> 1. Search for a desired report 2. Provide report parameters 3. Generate a report 4. View a report 5. Print a report 6. Distribute a report 7. Create an ad-hoc report 8. Generate or view a Geographical Information System (GIS) Report 	9. Automated generation of scheduled report

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4 Baseline Analysis

4.1 Current Method

The current CWS/CMS system is a distributed client/server application with mainframes providing database and reporting services to state, county and vendor workstations. In the current architecture, the client utilizes a centralized DB2 database that resides on IBM mainframes hosted at the State Data Center. The majority of business logic, business rules, and presentation logic resides on the workstation which runs the Microsoft® Office suite. Users rely extensively on Microsoft® Word for capturing case notes and deploying forms used to capture information.

At the county level, application servers function as intermediaries between a group of workstations (associated with a county or site) and the host. These servers minimize the traffic and number of connections between the host and workstations. They also provide a staging area for software distribution to reduce bandwidth congestion, such as the distribution of software to workstations over local-area-network (LAN) resources.

The current system has a number of voids in delivered functionality and compliance with federal SACWIS requirements and business functional requirements. Section 3.2 Business Problem or Opportunity of this FSR contains a summary of these functional voids and documents the following characteristics of the current system:

- Inability to provide acceptable responses to problem/opportunity elements of the business practice.
- Limited ability to meet current and projected future needs
- Interface navigation complexity/constraints
- Data collection and management deficiencies
- External information exchange constraints/deficiencies
- Failure to meet the goals, objectives, and functional requirements of the business practice
- Low user satisfaction

4.2 Technical Environment

Technical Factors

- **Expected Operational Life of the Proposed System**

The expected operational life of the proposed solution is through 2029. A timeline to execute the proposed solution is detailed in Section 2.1.8 – Major Milestones and in the project schedule contained in Appendix E - CWS-NS Project Schedule.

- **Proposed Solution Interaction with Other Systems**

The current system has non-existent or extremely limited information exchange interfaces to other program, agency and organization data archives. The new technical environment will close these functional gaps through implementation of the Information Exchange Interfaces in Section 3.2.2.4. Access constraints that impact CWS workers and external families, service organizations and service providers will be addressed through a delivered “self-service” capability.

- **State-Level Information Processing Policies**

The proposed solution will comply with the State’s Technology Strategic Plan, Executive Order S-03-10 and legislation AB 2408 (Section 11546.3.b.1.B, page 17) as well as federal SACWIS requirements. The proposed solution will achieve SACWIS compliance with a combination of capabilities in the core software services, as well as custom-developed software services focused on closing gaps in the core software services.

- **Financial Constraints**

Current state financial conditions require that the technical environment leverage computing infrastructure, software services and M&O costs to ensure timely system delivery and cost effective operations. The computing infrastructure described in Section 5 – Proposed Solution, provides the maximum possible flexibility, extensibility and maintainability through the SOA computing and service-based software models. These foundational elements allow the solution to be delivered in small units that can more easily align with fiscal fluctuations than traditional long-term, single-delivery system models.

- **Legal or Public Constraints**

There are currently no identified legal or public policy constraints that should impact the delivery of the proposed system. In like manner, there are currently no identified agency policies and procedures related to information management that should impact the delivery of the proposed system. The proposed system does, in fact, align with currently evolving standards and guidelines of both the State and federal partners for infrastructure and software delivery. All standards and guidelines are included in Appendix E: Legislative Reference included in the FSR as Appendix A: Report to the Legislature: Child Welfare Services Automation Study.

- **Agency Information Technology Policies and Procedures**

The system will comply with all agency information technology policies and procedures.

- **Anticipated Changes to the Equipment, Software or Operating Environment**

Anticipated changes to the equipment, software or operating environment are defined in Section 5 – Proposed Solution.

- **Availability of Personnel Resources**

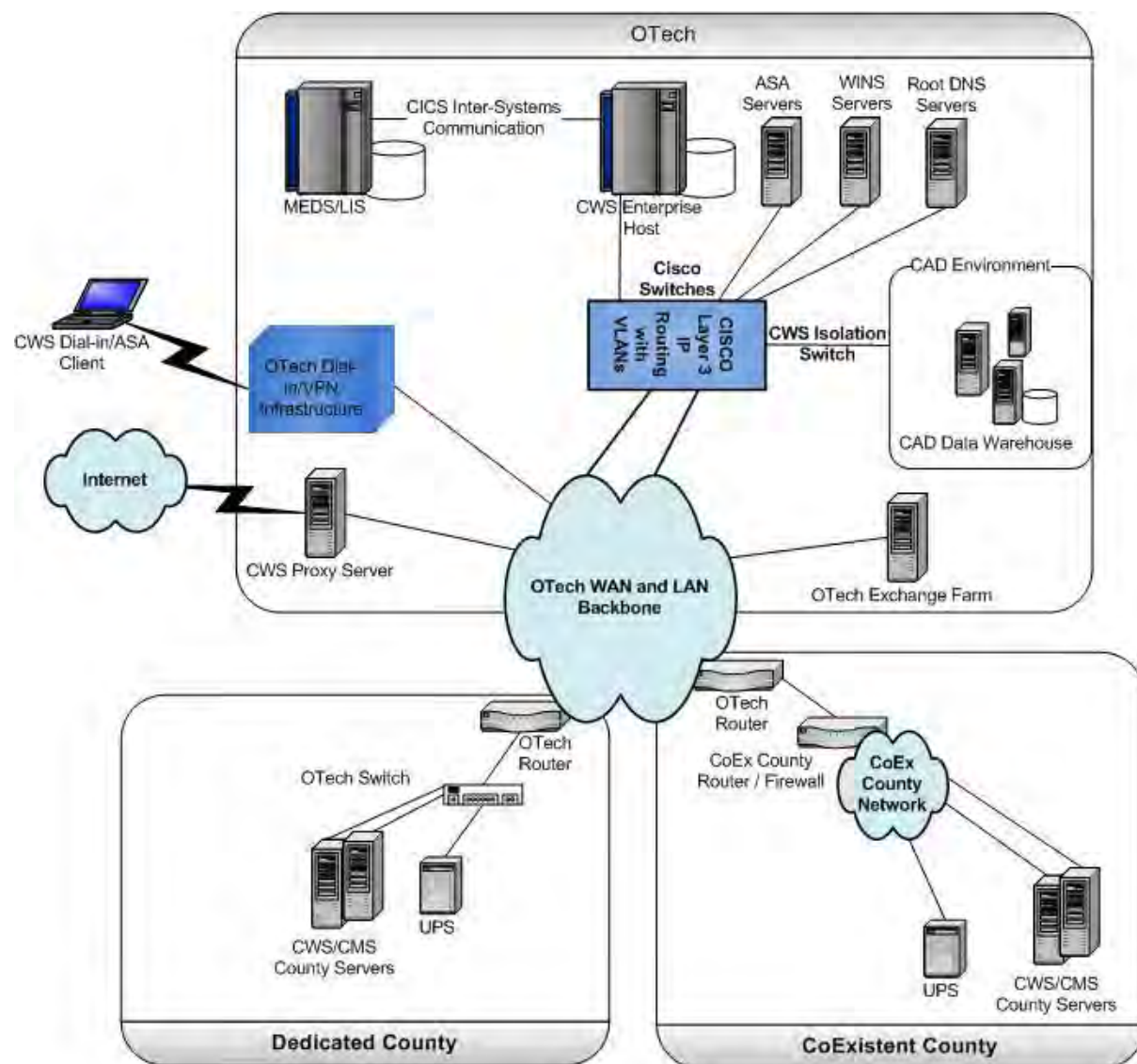
Because the proposed solution will utilize a computing infrastructure that is not widely deployed in the State, contract services will be utilized for initial system delivery and M&O activities until the State can develop personnel with the required skills.

4.2.1 Existing Infrastructure

The existing system is a multi-tiered client/server application comprised of several components. The major components are a workstation user interface, application servers, a mainframe back-end and database, and the OTech backbone. In addition to SAS analytical tools, CWS/CMS includes a separate CAD data warehouse environment for reporting. The core of CWS/CMS resides on two mainframes. The primary role of the mainframes is to provide database and transaction services.

The following figure illustrates the existing infrastructure from a logical topology.

Figure 2 - Current System Logical Topology



It is important to note that none of the existing infrastructure will be utilized in the proposed solution.

The following provides details of the existing infrastructure, application development and project management methodologies:

1. CWS/CMS client is hosted on more than 17,000 state and county workstations, and utilizes the transaction architecture under the Customer Information Control System (CICS) environment to support business processes.
2. The application servers provide intermediary functionality between distributed workstations and the mainframes. The application servers minimize network traffic which is up to OPT-E-MAN[®] bandwidth and total over 300 connections

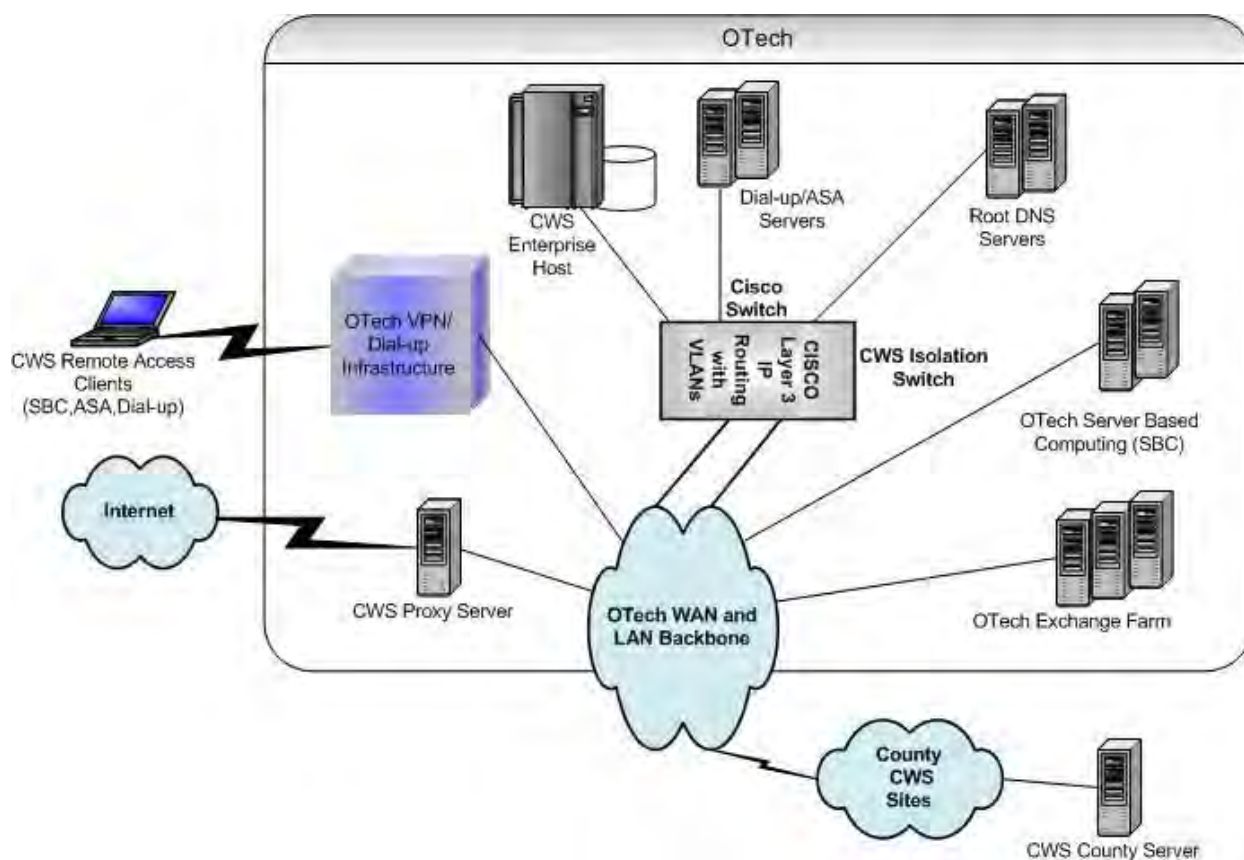
between the host and workstations. They also provide a staging area for software distribution to reduce bandwidth congestion. The 220 application servers are hosted locally in county server rooms and are designed to perform several functions including file sharing; print services, domain control, and antivirus updates; and acting as an application gateway.

3. The primary network protocols for the existing system infrastructure are; TCP/IP; POP3; UDP; Ethernet.
4. The application software is programmed using the Common Business Oriented Language (COBOL) and Visual Basic v6.
5. The personal productivity software includes Windows Office 2003 suite, Dragon NaturallySpeaking, JAWS, WinZip, SAP, Filenet, Documentum, Cofax, and Adobe.
6. The operating system software for the county, project, and vendor office workstations is Windows XP. The application servers are running Windows 2000 and Windows 2003.
7. All CWS/CMS data is stored in a series of database tables and accessed through CICS transactions generated from the CWS/CMS workstation application. Transactions are processed by the CICS transaction monitor. The workstation client interacts with the DB2 database running on two z/OS v8 and v9 mainframes at the State Data Center.
8. The application development methodology utilizes waterfall iterations.
9. Project management of CWS/CMS is the responsibility of a designated OSI Deputy Director, who staffs the project through a combination of state, vendor, and consultant resources. The Deputy Director is responsible for all project activities performed by vendor, consultant, and state staff. The Deputy Director manages the scope, cost, and schedule of all project activities utilizing industry and best practices.
10. It is also important to note that users currently have limited access to CWS/CMS while in the field using a VPN or dial-up based on the current fat-client technology the dial-up connection to the CWS/CMS application is extremely slow. Opening case results in an average of approximately 110,000 bytes of data transferred from the host to the client workstation. Over a best-case 50kbps dial-up connection, the data transfer time for this single transaction could be over four minutes the average user executes 14 CWS/CMS transactions per day (six-million transactions per month divided by approximately 22,059 active users per CWS/CMS System Performance Report for November 2011). Transactions are defined as any command sent by a client workstation or Application server which causes the mainframe database to respond. This includes updates, queries, and database saves. These transactions do not include batch-processing volume. A code update on a user's portable workstation over a dial-up connection sometimes takes several hours to complete. If timely remote/mobile system

access were available, CWS workers could use CWS/CMS while away from the normal office environment. This would create a virtual office by providing these CWS workers the same access to resources whether at home, or in the field.

The following figure illustrates the existing remote access infrastructure from a logical topology.

Figure 3 - Remote Access Logical Topology



Currently, remote access to the CWS/CMS is cumbersome or the ability to connect is not available. CWS workers have identified the need to retrieve and record information while in the field. A few examples of how remote technology could be applied are as follows:

- While in court, case disposition information could be entered.
- While waiting for court hearings or while waiting with a child at a doctor's appointment the CWS worker could enter and update Case or Referral information.
- While in the home performing assessments or follow-up appointments, the CWS worker could enter data during or shortly after the visit.

- While performing after-hours duties, the CWS worker could access Case/Referral data for better planning and assessment of the child and family.
- As information is obtained while out in the field during personal interviews, phone conversations, visits with other organizations, the CWS worker could enter information directly into the CWS/CMS.

The current system also allows a limited number of concurrent users to access by means of Server Based Computing (SBC).

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5 Proposed Solution

The proposed solution will support the current and future needs of child welfare services through its support of the following Key Business Objectives identified above in section 3.3:

- Resource Utilization
- System Access
- Information Exchange Interfaces
- Business Collaboration
- Outcome-driven planning, management and assessment
- SACWIS Compliance

The CWS-NS project is focused on providing a solution that will meet business objectives that will:

- Improve service delivery and outcomes
- Allow more timely system enhancements to support changes in CWS practice
- Achieve SACWIS compliance required to maintain Federal Financial Participation (FFP) funding and avoid federal non-compliance penalties
- Reduce ongoing maintenance and operations costs

To meet this goal, it is critical that the solution meet technical objectives that will:

- Replace the highly-distributed legacy CWS/CMS with a centralized, web-based SOA computing infrastructure.
- Replace the proprietary CWS/CMS software with Commercial-Off-The-Shelf (COTS) software that meets the majority of the business practice needs.
- Develop custom software services to close any operational gaps in the COTS software capabilities.

It is also critical that the solution meet the business objectives to:

- Achieve SACWIS Compliance to ensure retention of Federal Financial Participation (FFP) at current or improved participation levels
- Facilitate better resource utilization through elimination of redundant data entry, increased availability of information and documentation, and timely business practice execution
- Improve CWS Worker, Service Provider and Service Organization access to system information through portal and mobility technologies
- Improve user access, extraction accuracy and completeness of data acquired in external state/county and business partner repositories

- Improve communication/collaboration and information management between CWS workers, community organizations, service providers and multi-disciplinary teams.
- Improve the case management outcome/process planning, management and assessment/ reporting.

Collaborative analysis and evaluation of alternative approaches by OSI, CDSS and the stakeholder community, has determined that replacement of the CWS/CMS through a Buy/Build approach (COTS or Government Off-the-Shelf [GOTS] software) will achieve the best alignment with the program goals, policies, needs and expectations. This approach provides the maximum potential hardware and software flexibility to support current and future needs of child welfare services.

It was determined that the Buy/Build alternative:

1. Provides business value to the program and stakeholder community in the shortest time duration because of its “out-of-the-box” approach for initial implementation.
2. Provides the shortest duration for achievement of SACWIS compliance and business-value realization.
3. Would result in the most cost-effective Total-Cost-of-Ownership (TCO) of the evaluated alternatives.

The implementation and state acceptance of the core business capabilities delivered in DD&I - Phase 1 (15 month duration after contract award) will allow the decommissioning of CWS/CMS and over 100 external systems throughout the State. The initial release will be a one-time statewide deployment upon the completion of DD&I - Phase 1. The additional 12 months planned for DD&I - Phase 2 will provide business capabilities required to meet program and county functional gaps and/or process enhancements not available in the core business capabilities delivered in DD&I - Phase 1. The services created during this phase will be deployed statewide both when they are accepted by the state, and the counties are ready to implement.

Analysis of the critical cost drivers influencing the selection of the proposed solution focused on the computing infrastructure, the software delivery and the staffing requirements. The buy/build solution is planned to be hosted in a SOA-based Enterprise Computing Infrastructure, which provides the server-based computing hardware, server operating system software, enterprise database and single web (portal) interface.

The software delivery is planned to be executed through a combination of (1) pre-built, configurable COTS/GOTS software services and (2) custom-built software services that fill functional gaps in the COTS/GOTS offering. While the initial software implementation will be exclusively for the CWS-NS, future utilization is envisioned to leverage an Enterprise/Domain Software Services model. Within the SOA environment, individual software services will be available for shared enterprise-wide use by all domains (Enterprise Software Services) or for use only by a specific domain (Domain

Software Services). Defect correction, enhancements and maintenance of any single service or group of services will be executed at the “service” level, so only the individual service or group of services would be affected.

By hosting (exposing) the Enterprise Software Services and the Domain Software Services on an Enterprise Computing Infrastructure, there is the ability to provide a foundation offering **interoperability** across multiple health and human services programs. An evolving Software Services and Computing Infrastructure portfolio management vision is expected to facilitate the identification and reuse of software services and computing infrastructure components (e.g., ESB, Rules Engines, and Workflow Engines), which will minimize:

- **Duplication of computing infrastructure.**
- **Duplication of data** in multiple data repositories.
- **Duplication of user/consumer access** across multiple systems/silos.
- **Duplication of security frameworks** across multiple systems/silos (multiple logons, multiple passwords).
- **Multiple vendor contracts** to deliver systems/silos and Maintenance & Operations (M&O) support.
- **Duplication of vendor personnel** to deliver systems/silos and M&O support.
- **Duplication of state personnel** to oversee delivery of systems/silos and M&O support.
- **Duplication of common functionality** across multiple systems/silos (e.g., search, print formatting, form generation, form auto-population, calendaring, reporting).
- **Creation/maintenance of multiple “data exchange interfaces”** to share and/or synchronize data between silos.
- **Proliferation of proprietary platforms** across multiple systems/silos
- **Scalability issues**

One of the most significant benefits of the Enterprise Computing Infrastructure and Enterprise/Domain Software Service architecture is the interoperability inherent in this architecture. Interoperability allows the external partner community to communicate and exchange data as well as provide services to, accept services from other and effectively use those services in individual or collaborative operations. Interoperability reduces complexity and facilitates the management of heterogeneous environments, while enhancing choice and innovation in a collaborative model.

During the implementation of the CWS-NS, if it is determined that a computing infrastructure and/or software services are available, compatible and interoperable with the CWS-NS goals and objectives, a special project report(s) (SPR) will be submitted to reflect the reduction in costs from leveraging interoperable services.

The use of pre-built, configurable COTS/GOTS software services will result in lower state and vendor staff requirements to develop and deliver the solution, reduced staffing costs because of the shorter delivery duration, and reduced staffing requirements to support its on-going operations.

Because the buy/build solution delivery will be more focused than previous initiatives, and because it will impact the manner in which the stakeholder population will utilize its capabilities, an extensive Organizational Change Management (OCM) effort is incorporated into the planning and funding of the CWS-NS project. More than training and communications, this OCM effort will facilitate preparation and transition of the stakeholder population into the new solution and its underlying environment.

5.1 Solution Description

The proposed technical solution is defined as a Buy/Build model, which will deliver a fully-operational solution purchased from a vendor(s). Custom software services will be developed to fill gaps in the purchased solution capabilities that exist because of specific state or federal business practice, law, and/or policy. This alternative is not expected to reuse any of the existing CWS/CMS application elements. Web technologies and layered architecture will separate the user interface, the application logic, and the data. The CWS-NS will provide its users and partner applications access to business process functionality through a web browser and the Internet to a web portal designed to accommodate custom views and expose county specific workflow preferences.

The solution will provide a standards-based environment that accommodates all stakeholders, including different levels of government, service organizations and service providers. There are two foundational components that make up this new IT infrastructure:

- A Service-Oriented Architecture (SOA) will host and manage software services specific to the solution (Domain Services), as well as interoperable services (Enterprise Services) that are shared across the enterprise or consumed by information exchange partners. The assimilation of these services into components, with configurable business rules, allows them to be exposed through a global service registry for use by applications requiring similar services and their integration into multiple business processes.
- An Enterprise Identity Management (IDM) system that manages all types of users in a consistent way. It will allow for various security policies to be applied as set by various security and privacy policy organizations

Internal and external services will be accessible through independent layers of the application (e.g., User Interface independent from Services, Services independent from Business logic, Business logic independent from Data). This loose coupling of services (a core SOA requirement) ensures changes to one layer can be made independent from the other layers. **NOTE:** For details on the design and capabilities of the solution architecture, refer to Appendix H – CWS-NS Technical Architecture Vision.

Because the underlying computing infrastructure must be able to accommodate change with minimal impact to the functionality and performance of the system, the separation of capabilities into layers and the incorporation of reusability and extensibility concepts into the solution environment support cost and time efficiencies when scaling services across the infrastructure. Scalability is typically achieved through addition of limited hardware and/or specific software services instead of entire additional systems.

The CWS-NS is envisioned as having a minimum of four conceptual layers:

- **Presentation Layer**
Responsible for presenting information to the user and interpreting user commands. This layer provides the User Interface (UI) and Presentation Logic components.
- **Service Layer**
Defines the job the software does and directs domain objects to resolve problems, including work flow configurations. This layer executes tasks that are meaningful to the business or necessary for interaction with the service (application) layers of other systems.
- **Business Layer**
The business layer is responsible for representing concepts of the business, providing information about the business process and/or communicating business rules. This layer implements the business logic using a Business Rules Engine and a Business Rules Management System (BRMS) to support the authoring, deployment and management of business rules.
- **Data Layer**
The data layer encapsulates the data abstraction/access logic and data management technologies of the system, and provides a generic interface for database operations that allows services to access/update the data archives.

5.1.1 Hardware

The CWS-NS Project will establish the foundation for an enterprise-wide infrastructure starting in FY 2015/16 that leverages shared network technology to access the proposed solution residing at the State Data Center. This section primarily addresses infrastructure hardware from the county POP routers to the proposed production environment at the State Data Center, as well as hardware required for the test, training, development, and sandbox environments.

Prior to implementation in FY 2016/17, all counties will be evaluated for their readiness to implement the new solution. Each county must have appropriate hardware installed to allow users to obtain access to the proposed solution. All counties are responsible for acquiring their own network equipment and services as well as workplace computing hardware, such as workstations, mobile devices, printers, and other productivity equipment.

The proposed solution will utilize:

- Core Network Services:
 - OPT-E-MAN[®] routers will be distributed based on the gap analysis between the State Data Center and County Local Area Networks (LAN). They will function and be designated as POP routers at the county LANs. These application WAN routers will need to provide 100 MB of connectivity.
 - Switches required for Internet connection are available in the Tenant Managed Services - Premium (TMS-P) service offering and have been included in the core network services costs for this solution. These include a fast 1 GB connection.
 - Firewalls/Intrusion Protection equipment is included in the cost of the TMS-P rack services.
 - The proposed solution will include three Standard Server Cabinet (Racks) located in the TMS-P. Capacity and rates for these racks are based on the following four consumables:
 - Physical Space - 36 RU
 - Bandwidth - 20 GB
 - Power - 10 KW
 - Storage Connections - 18
- The TMS-P is designed to be a high density, highly virtualized data center with the goal of sharing infrastructure with other government agencies. This shared infrastructure allows for the design of new services within the State Data Center. The proposed solution will have access and may utilize some or all the following TMS-P services based on the COTS solution selected.
- TMS-P racking services will include:
 - The space, cooling and power
 - The purchase and installation of cabinets and cabling
 - WAN design
 - The purchase, installation, configuration, test, and operation of the WAN hardware
 - The purchase, installation, configuration, test, and operation of the LAN hardware
 - The purchase, installation, configuration, test, and operation of the connection to the Internet
- Ongoing maintenance and support of:
 - Space, cooling, power, cabinets and cabling

- WAN hardware
- LAN hardware
- Service Desk and Operation Center
- Installation of a CGen network connection to the cabinet

Hardware specifications may change depending on the COTS solution selected, but is sized for projected capacity and multiple isolated environment configurations. The hardware specifications are based on market research. For planning purposes, however, the following are the minimum hardware specifications required for the proposed solution:

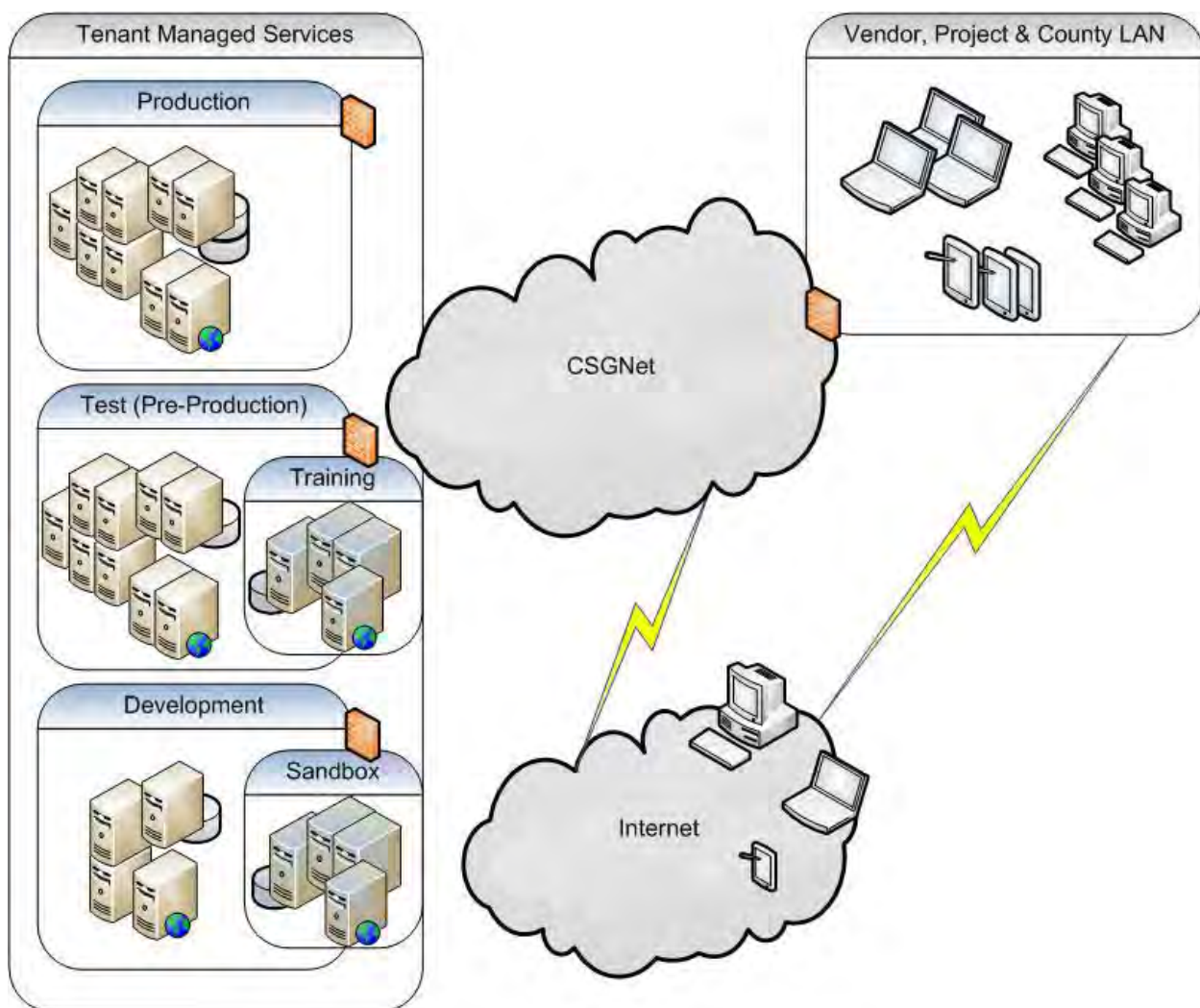
- Production Environment
 - A production database server with at least eight 2.13 GHz, quad-core (4 Core) processors with 8 GB of memory and 4 TB of disk space. The proposed solution recommends implementing SAN technology to provide these needs. The production database will use off-site storage services for disaster recovery and archiving.
 - A backup production database server with at least eight 2.13 GHz, quad-core (4 Core) processors with 8 GB of memory and 4 TB of disk space of SAN storage.
 - Five production application servers with at least sixteen 2.13 GHz, quad-core (4 Core) processors with 16 GB of memory and 1TB of disk space.
 - Two production web servers with at least eight 2.13 GHz, quad-core (4 Core) processors with 16 GB of memory and 500 GB of disk space.
- Test Environment
 - Two test database servers with at least eight 2.13 GHz, quad-core (4 Core) processors with 8 GB of memory and 4 TB of disk space. The proposed solution recommends implementing SAN technology to provide these needs. The test environment will use offsite storage for recovery services.
 - Five test application servers with at least sixteen 2.13 GHz, quad-core (4 Core) processors with 16 GB of memory and 1 TB of disk space.
 - Two test web servers with at least eight 2.13 GHz, quad-core (4 Core) processors with 16 GB of memory and 500 GB of disk space.
- Training Environment
 - A virtualized training database server with at least four 2.13 GHz, quad-core (4 Core) processors with 8 GB of memory and 4 TB of disk space. The training environment will use on site storage for recovery services.

- Two virtualized training application servers with at least eight 2.13 GHz, quad-core (4 Core) processors with 16 GB of memory and 1TB of disk space.
- A virtualized training web server with at least four 2.13 GHz, quad-core (4 Core) processors with 8 GB of memory and 500 GB of disk space.
- Development Environment
 - A development database server with at least four 2.13 GHz, quad-core (4 Core) processors with 4 GB of memory and 2 TB of disk space. The proposed solution recommends implementing SAN technology to provide these needs. The development database may use vendor recommended software development tools to manage and store build versions. The development environment will use on site storage for recovery services.
 - Two development application servers with at least eight 2.13 GHz, quad-core (4 Core) processors with 16 GB of memory and 1TB of disk space.
 - A development web server with at least eight 2.13 GHz, quad-core (4 Core) processors with 8 GB of memory and 500 GB of disk space.
- Sandbox Environment
 - A virtualized sandbox database server with at least four 2.13 GHz, quad-core (4 Core) processors with 4 GB of memory and 2 TB of disk space. The system will not require SAN technology or use off-site storage services.
 - Two virtualized training application servers to assist in development with at least eight 2.13 GHz, quad-core (4 Core) processors with 16 GB of memory and 1TB of disk space.
 - A virtualized training web server with at least four 2.13 GHz, quad-core (4 Core) processors with 8 GB of memory and 500 GB of disk space.

The above hardware components constitute the critical equipment required at the State Data Center and dedicated counties (routers only) for the proposed solution to function properly and be accessible to the end user. These hardware components do not represent the entire proposed solution network, which is outside the scope of this report. As mentioned earlier, the State still needs to conduct a study of the counties' technical infrastructure, including a gap analysis, to determine if additional hardware is required by the counties.

The following model illustrates the operational environment for the above detailed hardware.

Figure 4 - CWS-NS - Technical Environment



5.1.2 Software

The software requirements associated with the proposed system are the following: the Operating System (OS), COTS software, virtualization software, Enterprise Service Bus (ESB), Workflow Engine, Rules Engine, web server software, Identity Management (IDM), Database Management System (DBMS), Business Intelligence (BI) software, data warehouse, content/document management, application development software, portal, search engine, and other system tools.

5.1.3 Technical platform

The technical platform for this solution will deliver a fully-operational product resulting from the combination of purchased core capabilities software and custom-developed services, implemented in a SOA environment. It assumes the vendor product will run on UNIX enterprise architecture, with a database that is accessed through web servers,

with connectivity provided on the State CGen WAN, through workstations at State/county offices or via mobile devices.

5.1.4 Development Approach

The vendor responses to RFI #2 further validated the buy/build approach and helped establish the development approach and tasks to be used during the solution delivery. Of the six (valid) vendor responses, the average COTS/Custom Development distribution across the required software capabilities was as follows:

☒ COTS = 74% ☐ MOTS 0% ☒ Custom Development = 19% ☐ Others ☐ None

The buy/build development approach will result in a number of cycles and different operational models during the life of the solution delivery. Detail of the required software capabilities are provided in section 3.4 – Business Functional Requirements. Detail of the segmentation, sequencing, development effort and completion/delivery of the computing infrastructure, software services and support elements are available in Appendix F - CWS-NS Project Schedule.

5.1.4.1 Purchased Product Configuration

The purchased product core capabilities will be implemented without any modification to the vendor's baseline code base. Implementation/customization will be limited to configuration capabilities delivered as part of the core product. Specification for the configuration will be accomplished through project analysis of the core product capabilities, alignment with the business practice and configuration of core capabilities to support the business practice. Business Process Re-engineering (BPR) and Organizational Change Management (OCM) activities will be incorporated into the core product configuration/delivery process.

5.1.4.2 Data Migration

Data migration will occur on two levels during delivery of the system. The first level will focus on migration of some defined sub-set of production CWS/CMS data to be utilized for core product configuration and to support development of the custom services. At the point of system deployment, the same migration process will be expanded to include the entire production CWS/CMS data archive including BLOB² data. Execution of this data migration will require development of scripts and code to implement the migration and execute necessary testing of the process.

The second level will focus on migration of data from identified decommissioned external systems in CDSS and counties. Not all decommissioned external systems contain data that must be integrated into the new system. Like the core CWS/CMS system data, the data will need to be migrated in two passes. The first pass will support configuration and/or custom service delivery, and the second pass will support system

² Binary Large Object: a collection of binary data stored as a single entity in a database.

deployment. Execution of this data migration will require development of scripts and code to implement the migration and execute necessary testing of the process.

5.1.4.3 Custom Service Development

Development of the custom services will be accomplished using an incremental (and iterative) lifecycle. This will require enough initial product specification to allow prototyping activities to initiate definition of the service, and iterative methods to support its refinement into the final delivered service. This effort is the one true software development activity in the project and will follow software best practices for incremental/iterative development.

5.1.4.4 Automated Testing

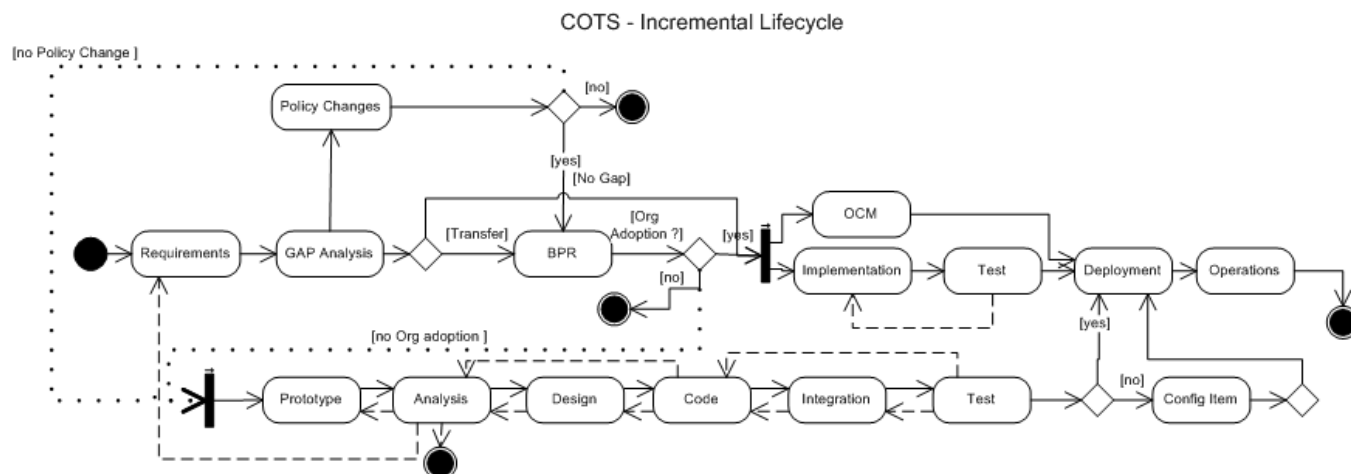
Automated testing requires development of software scripts and code that can continuously test new capabilities, as well as execute regression testing on previously developed services or service capabilities. Automated testing will also be a critical practice in determining load and capacity capabilities of the delivered system. While traditional input/result manual testing will be utilized by the stakeholder community for System Testing and User Acceptance Test (UAT), the automated testing will be used by the development/configuration staffs to expedite identification and correction of defects throughout the delivery lifecycle.

5.1.4.5 Development Lifecycle

The following model illustrates the development lifecycle to be utilized for the buy/build product delivery. There are two different development lifecycles embedded in this one hybrid model. The top lifecycle (showing a progression from requirements to gap analysis to BPR) will be used for the core product configuration. The lower lifecycle (showing a progression from prototype to analysis to design, etc.) is the incremental/iterative lifecycle to be used for custom service development. The project team has experience with the use of this methodology and would scale up resources according to roles and responsibilities required for successful implementation.

Both the COTS product configuration and the custom software service development are based on the incremental software development concept. However because of the differences between the activities for system configuration and custom software development, the hybrid model was provided to identify those activities that (especially gap analysis and BPR) are unique to COTS configuration.

Figure 5 - Buy/Build Lifecycle Model



The development approach begins with the business goals, needs and objectives (identified in the model as requirements). Through gap analysis, these business requirements are analyzed against the capabilities of the purchased product.

All identified gaps are mapped against existing policies to determine if there is a need or possibility to pursue changes in these policies to remove the gaps. At the conclusion of this analysis, there are three logical next steps:

- No changes are possible and the gaps must be filled. Develop a custom service to fill the gaps. Determine if the new service will result in any change to the business process/practice, and execute OCM if change to the business process/practice results.
- Changes can be made to mitigate some or all of the gaps. Execute BPR to determine impacts and execute changes to the existing practice. Utilize OCM to communicate/facilitate the change to the stakeholder community.
- No changes are possible and the gaps do not need to be filled. Communicate removal of the requirement from the system capabilities.

When a gap is identified that is not directly tied to a policy, the next step in the lifecycle will be to move to BPR. BPR analysis can determine if the current business process can be executed without support from the purchased product, or if a change can be made in the current business process to remove the gap. When doing BPR, it is important to remember that any tool may be an enabler of business processes. The business processes are what you must control.

All BPR outputs must be verified for organizational adoption. There are three logical outcomes from the combination of BPR and the verification for organizational adoption:

- BPR and organizational adoption is not possible and the gap must be filled; therefore, develop a service to fill the gap. Determine if the new service will

result in any change to the business process/practice, and execute OCM if change to the business process/practice results.

- BPR and organizational adoption are possible. Execute BPR to determine impacts and execute changes to the existing practice. Utilize OCM to communicate/facilitate the change to the stakeholder community.
- BPR and organizational adoption are not possible. Communicate removal of the requirement from the system capabilities.

The essential condition of this alternative is that no modifications can be made to the purchased product, in order to enable future vendor upgrades to these elements. All issues and gaps must be resolved through either development of a custom-built service (extension to the product) or via BPR.

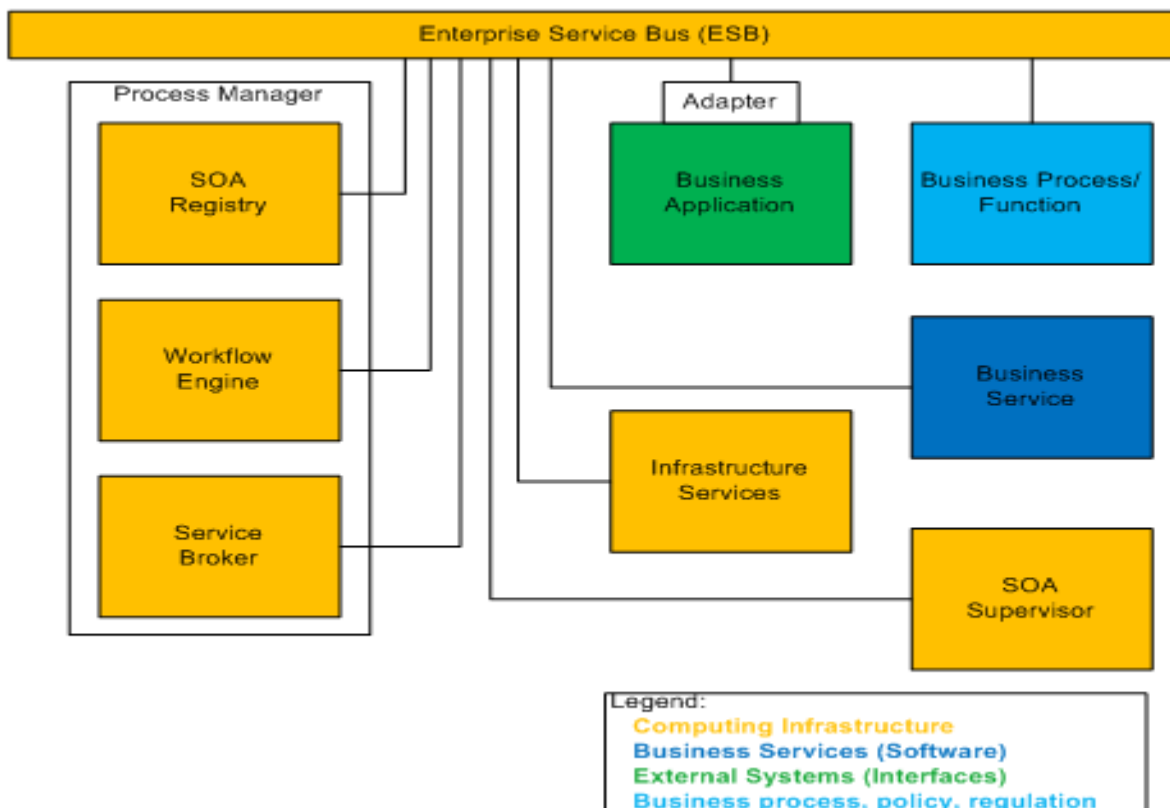
In parallel with the implementation of the purchased product, organizational change management needs to be executed to:

- Communicate the capabilities that will be delivered in the purchased product.
- Communicate capabilities that do not currently exist that will be available through the development of custom services.
- Communicate how the capabilities of the purchased product will be used to support the business practice.
- Communicate when services will be available to fill gaps between functionality desired in the system and available in the purchased product.
- Communicate changes (temporary or permanent) that will need to be made in how the system is used to execute the practice.
- Communicate any approved changes to the practice.

In summary, this development lifecycle is the most flexible and allows a majority of business needs to be delivered within the purchased product; which greatly shortens delivery of business value. Delivery of a developed service can be prioritized and sequenced to best align with business goals, needs and objectives. Because the functionality of the purchased product will not contain any customization, vendor-initiated upgrades to provide new functionality and/or address defect correction can be implemented with minimal impact to the operation of the system.

Service-oriented architecture is a critical element in the successful implementation of this approach. The following diagram illustrates how the SOA will connect the purchased product (shown as a business application) with custom-developed services (shown as a business service). This will allow the purchased product to remain unaltered, without being impacted by or causing impact to custom-developed services. Connection to other agency systems (referenced above as information exchange interfaces) will be accomplished using adapters with the business application.

Figure 6 - SOA Support of the Development Lifecycle



5.1.5 Integration issues

There are no known technical issues with integration, based on our SOA approach. There are a number of business issues that will need to be resolved for integration. These are:

- The time to negotiate the agreements with each agency
- The cooperation from each agency in defining what information will be shared along with the business rules for that information

The primary systems which require information exchange interfaces are listed in Section 5.1.7 – Technical Interfaces. Technical issues that arise during delivery of these information exchange interfaces will be addressed by the vendor through the change management process, and will be resolved through vendor/project collaboration.

Custom service development could result in integration issues between the custom service and core product services. Because of the SOA environment, and the ability to control the design and delivery of the custom services, this integration risk is assumed to be very low.

In addition to the defined mandatory information exchange interfaces, there are other state and county systems where information exchange interfaces will be required (i.e., DOJ, DMV, County Payment Systems, Service Provider systems, health provider

systems, education systems, etc.). Integration of these systems into the solution will require technical study/analysis and will have the same business issues as identified above.

5.1.6 Procurement Approach

OSI plans to procure a COTS solution, hardware, other required software, and contract services from a Systems Integrator (SI) (i.e., prime vendor) to implement the CWS-NS solution. The SI is responsible for the initial purchase of all hardware and software needed for the CWS-NS solution and will transfer the hardware titles, hardware maintenance agreements, software licenses, and software maintenance agreements upon state acceptance of the solution. Contract services are needed from the systems integrator to install, configure and implement the COTS solution and the technical infrastructure, (i.e., DD&I - Phase 1) as well as design, develop and implement the required custom services to fill functional gaps in the COTS solution (i.e., DD&I - Phase 2). The SI will also design, develop and implement several interfaces between the CWS-NS and other federal, state and county systems during the two DD&I phases and will provide service and support during the M&O phase.

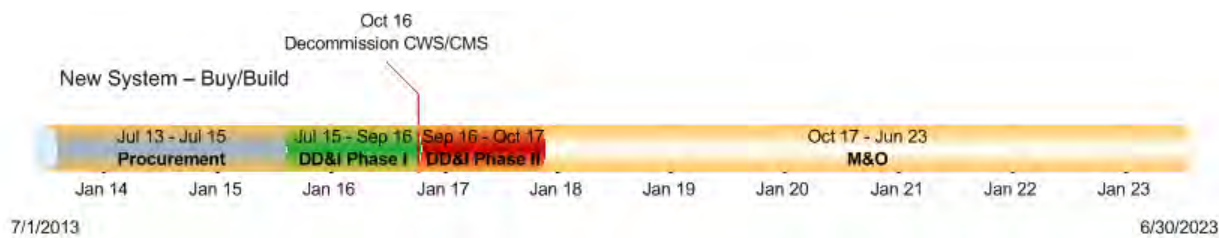
The estimated term of the systems integrator's contract is eight years, one year and three months for DD&I - Phase 1, one year for DD&I - Phase 2, and five years and nine months for the M&O Phase. The estimated cost of the systems integrator's contract is \$108,836,528. The distribution by phase is as follows:

Table 5-1 - SI Costs by Phase

	Planning & Procurement	DD&I – Phase 1	DD&I – Phase 2	M&O	Total
Total Cost by Phase	\$0	\$55,343,367	\$19,798,161	\$33,695,000	\$108,836,528

The following is the estimated timeline for the procurement phase (i.e., development of the procurement vehicle and the solicitation), DD&I - Phase 1, DD&I - Phase 2, and M&O Phase:

Figure 7– Buy/Build Timeline



In addition, OSI and CDSS plan to procure support services contracts for an intellectual property lawyer, county consultants, technical consultants, organizational change management consultants, independent project oversight consultants, and independent

verification & validation consultants using a variety of procurement vehicles. Interagency Agreements (IAA) with federal, state and county agencies are required to implement system interfaces between their systems and the CWS-NS during DD&I - Phase 1 and DD&I - Phase 2.

5.1.6.1 Proposed Prime Vendor Procurement Vehicle(s)

☐IFB ☐RFI ☐CMAS ☐MSA ☐IFB ☐RFO ☐RFP ☒OTHERS ☐NONE

OSI conducted a comprehensive assessment of the various competitive IT procurement vehicles set forth in the State Contracting Manual. The objective of the assessment was to determine which procurement vehicle would best meet the State's needs in acquiring the solution based on best value with the quickest procurement turnaround time.

5.1.6.1.1 Evaluated – Not Recommended

Several procurement vehicles were evaluated including the Request for Offer (RFO), Invitation for Bid (IFB), Request for Proposal (RFP), and the three Hybrid RFP procurement processes (i.e., Accelerated RFP, Solution Based Requirements, and Multiple Proposal Stages Approach). The following describes the procurement vehicles evaluated by OSI including the reason why they were rejected or accepted:

- **RFO** – is a vehicle used to procure contracts off DGS' Leveraged Procurement Agreements (LPAs). Purchasing off an LPA streamlines state purchases by removing repetitive, resource intensive, costly and time consuming bid processes from departments. An RFO is an excellent vehicle to use when departments require a contract within a short time period. However, the dollar threshold for the RFO is \$500K for California Multiple Award Schedules (CMAS) and \$1.5M for Master Service Agreements (MSA). Since the systems integrator contract is approximately \$108,836,528, it significantly exceeds the threshold for CMAS and MSA. Departments can submit a Leveraged Procurement Agreement Exemption Request to obtain DGS approval to exceed the established dollar thresholds; however, OSI will have a very difficult time justifying the use of either procurement vehicles due to the complexity and high cost of the contract. Consequently, this procurement vehicle was rejected.
- **IFB** - is commonly used by departments when they clearly know the "detailed" specifications and requirements regarding the IT goods and services they want to purchase. A structured, multi-step procurement process is used to acquire the IT goods and services. Contract award is either based on the "lowest" bid or "best value" bid (i.e., value effective procurement) meeting all specifications and requirements from a responsible and responsive bidder after applying any preference requirements or discounts.

This procurement vehicle was rejected because OSI does not clearly know all of the "detailed" specifications and requirements for the CWS-NS solution in order to use an IFB based on the "lowest" bid. For a value effective procurement, OSI

would prefer to use an RFP rather than an IFB due to the size and complexity of the project.

- **RFP** – is commonly used by departments to conduct a value effective procurement. The specifications and requirements for the IT goods and services are general in nature. The RFP typically reflects the existing business problems, short/long-term business objectives and detailed insight upon which vendors can offer a matching perspective in their proposals. A structured, multi-step procurement process is used to acquire the IT goods and services. Contract award is based on value effective factors that include cost. These factors are weighted, generally the administrative and technical requirements equal 50 percent and cost equals 50 percent.

This procurement vehicle was rejected due to lengthy time required to complete the entire procurement cycle and the limited dialogue that occurs between the state and the vendors during the bid process. For projects the size of CWS-NS, three years or more are normally required to complete the procurement. A good portion of this time is expended developing RFP addenda and obtaining approvals from various control agencies before they are released to the vendors. The quality of the bid process also suffers due to misinterpretations of, or gaps in the information provided in the RFP as well as the limited dialogue with the vendors.

- **Hybrid RFP Procurement Process (Solution Based Requirements Approach)** – The Solution Based Requirements Approach is an alternative to the formal RFP procurement process where the departments provide only the business problems to be solved or goals to be achieved, and the bidders propose a business solution. This procurement vehicle is used by departments who do not know or have vague knowledge of the technical specifications and requirements needed to acquire the appropriate IT goods and services. Several confidential discussions are conducted throughout the solicitation process to encourage dialogue between the departments and bidders. This is critical to ensure that the department's business requirements and goals are clearly stipulated in the procurement document and the contractor is qualified and capable of meeting the requirements prior to entering into a contract.

The Solution Based Requirements Approach, falls under Public Contract Code (PCC) §6611 and is conducted under the authority of DGS. Departments must gain prior approval from DGS before the solicitation is released under this PCC.

This procurement approach was rejected because OSI has an excellent understanding of the technical specifications and requirements needed for an RFP as well as the technical solutions available in the marketplace. Also, OSI has already conducted several technical alternatives studies, including the recent *Child Welfare Services Automation Study*, received vendor responses from two requests for information (i.e., market surveys), attended several vendor demos, and evaluated vendor responses to the CWS/Web RFP, which was the prior procurement effort that was suspended in the 2011 State Budget.

- **Hybrid RFP Procurement Process (Multiple Proposal Stages Approach)** – The Multiple Proposal Stages Approach is used for only the most complex and risk sensitive IT procurements. The Multiple Proposal Stages Approach generally includes most of the elements of the aforementioned Solution Based Requirements Approach and the Accelerated RFP Approach described later in this section, as well as the following two stage process:
 - Stage 1 is the contractor pre-qualification that results in separate contracts for: 1) the proposal submittal stage and 2) the solution implementation stage.
 - Two or more contractors are pre-qualified in Stage 1.
 - Contract language for Stage 1 contracts is standard, and not negotiable. Contract language for Stage 2 contracts can be negotiable.
 - A contractor's Stage 1 and 2 contracts are separate documents, but part of an overall single procurement.
 - Contractors may be paid for both Stage 1 and Stage 2 deliverables

The Multiple Proposal Stages Approach falls under Public Contract Code (PCC) §6611 and is conducted under the authority of DGS. Departments must gain prior approval from DGS before the solicitation is released under this PCC.

Similar to the Solution Requirements Approach, this procurement approach was rejected because OSI has an excellent understanding of the technical specifications and requirements as well as the technical solutions available in the marketplace. Also, OSI has already conducted several technical alternatives studies, including the recent Child Welfare Services Automation Study, received vendor responses from two requests for information (i.e., market surveys), attended several vendor demos, and evaluated vendor responses to the CWS/Web RFP, which was the prior procurement effort that was suspended in the 2011 State Budget.

Further, the Multiple Proposal Stages Approach costs more money and time to conduct. Additional costs are required to pay each pre-qualified vendor for the Stage 1 deliverables, including demonstrations of their solutions (i.e., proofs of concepts). The FI\$Cal Project, for example, paid each pre-qualified vendor on its Stage 1 effort \$1.4M. Extra time is also required to conduct this type of procurement approach due to the two stage process.

5.1.6.1.2 Evaluated - Recommended

- **Hybrid RFP Procurement Process (Accelerated RFP Approach)** – The Accelerated RFP Approach is a formal RFP procurement that includes a critically constrained timeframe in which to complete the procurement and may include some or all of the following elements:
 - Accelerated RFP development sessions where representatives from the acquiring Department, the DGS/Purchasing Division, the DGS/Office of Legal Services and the California Technology Agency (CTA) are committed to meet for consecutive days to write the RFP requirements and evaluation criteria.

- Smaller procurement teams
- Parallel reviews of the solicitation documents (the acquiring Department, the DGS and the CTA representatives).
- Request for Information (RFI) required prior to the development of the solicitation document to enable the bidder to determine merit of participating, and whether funding levels are appropriate. The RFI is also used by the department to determine what is available in the marketplace, and if their requirements can be met by the bidder community.
- Expanded use of Confidential Discussions during the solicitation process, prior to submission of Final Proposals.
- Phased implementation and progress payments
- Use of Alternative Protest Process

The Accelerated RFP Approach falls under Public Contract Code (PCC) §6611 and is conducted under the authority of DGS. Departments must gain prior approval from DGS before the solicitation is released under this section of the PCC.

OSI accepts the Accelerated RFP Approach as the procurement methodology of choice since it meets OSI's objective of acquiring the CWS-NS solution based on best value with the quickest procurement turnaround time. The RFP, by its very nature, is a value effective procurement resulting in a solution based on best value. In regard to the procurement turnaround time, close collaboration with DGS and CTA in the development and review/approval of the RFP as well as using the Alternative Protest Process will streamline and speedup the associated solicitation process.

This approach also allows OSI and the vendors to engage in constant dialogue throughout the solicitation process to mitigate future risks and issues while allowing the broadest level of competition and fairness. Early and continuous communication between the State and vendors is an emerging procurement best practice, especially for large, complex projects. It allows the vendors to have a better understanding of the state's goals, needs and expectations, and at the same time allows the State to have a better understanding of the vendors' concerns, issues and risks as well as the potential gaps and required revisions to the RFP.

To use the Accelerated RFP approach, OSI must submit a written request to DGS for approval. The request will include the RFP's release under PCC 6611 and modifications to the State Model Contract language to conform to the Code of Federal Regulations. The elements of the Accelerated RFP Approach OSI plans to employ are as follows:

- Accelerated RFP development sessions between OSI, CDSS, DGS/PD, DGS/OLS, and the California Technology Agency (CTA).
- The use of smaller procurement sub-teams with specific domain expertise in the business program, project management, technical, and contract areas.

- Parallel reviews of the RFP with DGS and CTA representatives as well as county representatives and other key stakeholders.
- Initiate Request for Information (RFI) prior to the development of the solicitation document to enable vendors to determine merit of participating and whether funding levels are appropriate.
- Expanded use of confidential discussions to initiate communications with the vendors early and on a continuous basis. OSI will also use these discussions to negotiate RFP requirements, contract language, and other critical information contained in the RFP.
- Use of the Alternative Protest Process in accordance with PCC section 12125 et seq., to speed the resolution time of IT protests and to decrease the number of frivolous protests occurring in IT procurements.

OSI, in collaboration with representatives from DGS and CTA, will determine the number of external resources that are required to conduct the Accelerated RFP Approach and whether interagency agreements are needed prior to initiating the Accelerated RFP Approach.

OSI plans to conduct the entire solicitation (from the RFP's release until contract award) in one year. The following table shows the estimated Key Actions and Dates:

Table 5-2 - Key Actions and Dates

No.	Key Action	Date
1	Begin Developing the RFP	7/1/13
2	RFP Completed	4/30/14
3	RFP Approved by State and Federal Control Agencies	6/30/14
4	Release RFP to the Bidders	7/1/14
5	Receive Letters of Intent to Bid	7/11/14
6	Bidders' Conference	7/16/14
7	Last Day to Submit Questions for Q&A Set #1	7/21/14
8	Begin State Presentations of the RFP (Excluding the Contract) to the Bidders	7/28/14
9	Begin Confidential Discussions #1	8/4/14
10	Begin State Presentations of the RFP's Contract	8/18/14
11	Begin Confidential Discussions #2	8/25/14
12	Begin Preparing Addendum #1	9/1/14
13	Begin Confidential Discussions #3	10/13/14
14	Last Day to Protest Requirements	10/24/14
15	Receive Draft Proposals	10/31/14
16	Begin Draft Proposal Evaluations	11/3/14
17	Confidential Discussions #4	1/5/15
18	Begin Preparing Addendum #2	1/19/14

19	Confidential Discussions #5	2/9/15
20	Last Day to Submit Questions for Q&A Set #2	2/16/15
21	Receive Final Proposals	2/27/15
22	Begin Final Proposal Evaluations	3/2/15
23	Begin Demonstrations	4/10/15
No.	Key Action	Date
24	Public Cost Opening	4/24/15
25	Letter of Intent to Award	4/8/15
26	Last Day to Protest Award	5/15/15
26	Award Contract	6/30/15

5.1.6.2 Proposed Prime Vendor Contract Type

☒ Fixed Price ☐ Time and Materials ☐ Percentage of Benefit ☐ Other

OSI plans to use a fixed-price contract for the prime contractor. The contractor will receive payments throughout the design, development and implementation phase based on state acceptance of the contractor's deliverables. For the maintenance and operations phase, the contractor will receive monthly payments, in arrears, minus any state credits applied during the service period. State credits are based on the requirements stipulated in the service level agreement.

A risk assessment of the CWS-NS Project using the Interim Risk Criteria Guidelines was conducted to determine the level of risk protections required for this effort. Results of the assessment revealed an overall risk rating of high for the project. Consequently, OSI plans to use a nine percent withhold of the total value of the contract, include liquidated damages in the contract provisions with a maximum liability of 1.5 times the value of the contract including amendments, hold software in escrow, and add terms and conditions into the State's Model Language to protect the federal government and maintain consistency with the Code of Federal Regulations (CFR). OSI, however, is not planning to have the vendors secure a performance bond or letter of credit since ACF believes these two risk mitigation instruments limit competition. FFP approval for the project is contingent on following this ACF directive including the associated CFRs.

5.1.6.3 Market Research

OSI conducted two RFIs (i.e., market surveys) to determine whether Commercial Off-the-Shelf (COTS) systems were available in the marketplace that could meet the needs of CWS, while complying with SACWIS requirements. An RFI was released in September 2011 to survey the vendor community to identify existing systems which could support key CWS' business goals, needs, objectives, and capabilities. Eight responses were received. The responding vendors included: Accenture in partnership with CGI Technologies; Case Commons; Cúram Software Inc.; Deloitte Consulting L.P.; Dynamic Research Corporation (DRC); e-Systems; IBM Global Services; and Unisys Corporation. Several of the responses received from the vendors indicated that the COTS solution that they offered could support the proposed solution.

A second RFI was released in November 2011. The objective of this RFI was to identify the degree in which the vendors' solutions could meet state and county needs in the administration and provision of child welfare services and federal SACWIS requirements. A capabilities matrix was provided to all vendors that identified the business practice capabilities and SACWIS requirements that needed to be provided in their product offerings. Each vendor was asked to identify which of these capabilities were included in their existing solutions, any custom services that would have to be developed to completely fulfill the state and county needs, and what capabilities could not be met. Vendor responses from the second RFI substantiated viable solutions in the marketplace that could support the buy/build approach. Of the 1,120 total capabilities required for the CWS-NS, vendors stated that their solution could provide 70 to 84 percent of the capabilities straight out-of-the-box. The missing capabilities or gaps that require the development of custom services ranged from 13 to 30 percent. Except for one vendor, the no responses were very low, essentially ranging from one to two percent. For further details, refer to Appendix K, Validation of the Buy/Build Feasibility.

OSI plans to initiate another RFI prior to releasing the solicitation document to the vendors. This RFI will enable vendors to determine merit of participating in the RFP process and whether funding levels are appropriate. Results of this RFI will assist OSI in the development of the RFP requirements and adjusting the funding levels as necessary to promote fair and open competition.

5.1.6.4 Government Code Section 19130 (b) Justification

5.1.6.4.1 Systems Integrator

The use of a System Integrator (SI) is required to mitigate two critical project risks, which are:

- Lack of specific knowledge, skill, experience and certification necessary to implement the SOA architecture and COTS software
- Potential losses resulting from schedule delays, inadequate performance or solution defects

The CWS-NS utilizes an architecture and COTS software offerings that require specific knowledge, skill, experience and certification that do not exist within the State personnel. As a result, the timely and cost-effective acquisition of the knowledge, skill, experience and certification necessary to support this architecture and COTS software is best achieved through contracts with private sector companies. Because these private sector companies simultaneously and/or iteratively utilize this knowledge, skill, experience and certification with multiple customers on multiple projects, they are also able to employ/evolve product specific and industry best practices.

5.1.6.4.2 Technical Support Services

Technical support services are needed to ensure that the CWS-NS data exchange interfaces are implemented using best practices and industry standards. There are data exchange interfaces planned between the CWS-NS and 19 federal, state and county systems. These agencies use an assortment of systems ranging from legacy mainframe

systems to systems built on n-tiered or service oriented architectures using a variety of proprietary solutions.

These data exchange interfaces are required to support the CWS solution in complying with SACWIS requirements, Federal/State regulation/policy and enhanced support of the business practice. Delivery of these data exchange interfaces as part of the new CWS-NS solution will require extensive analysis, collaboration and negotiation with the agencies that own the systems that host the desired data. This effort will require technical services consultants that:

- Understand and have demonstrated experience in defining and facilitating interoperability between diverse systems and organizations.
- Can communicate the benefit(s) to the hosting agency of providing CWS access to the data.
- Can facilitate opening or developing the gateway (interface) to the data.
- Can facilitate the data availability model that best fits the CWS need (real-time, scheduled batch, on-demand).
- Can assist in the negotiation of interagency agreements and service level agreement guidelines and priorities that are in line with the data availability model.
- Have operational (technical) knowledge of a wide variety of platforms and computing infrastructures.
- Can assist in the negotiation of cost effective modifications (when required) to the hosting data source.

The State Personnel Board defines job classifications that are specific to business analysis, software specification/development and business practice support. There is no classification that focuses on the identification, analysis and/or development of data exchange interfaces and/or interoperability concepts. As a result, recruiting state employees who possess these unique, cross-functional set of technical, business and concept marketing skills is very difficult if not impossible.

Due to the complexity and fiscal impacts of the CWS-NS Project, it is critical to provide the level of support needed for the success of the project and therefore, it's in the best interests of the State to proceed with a personal services contract for technical services.

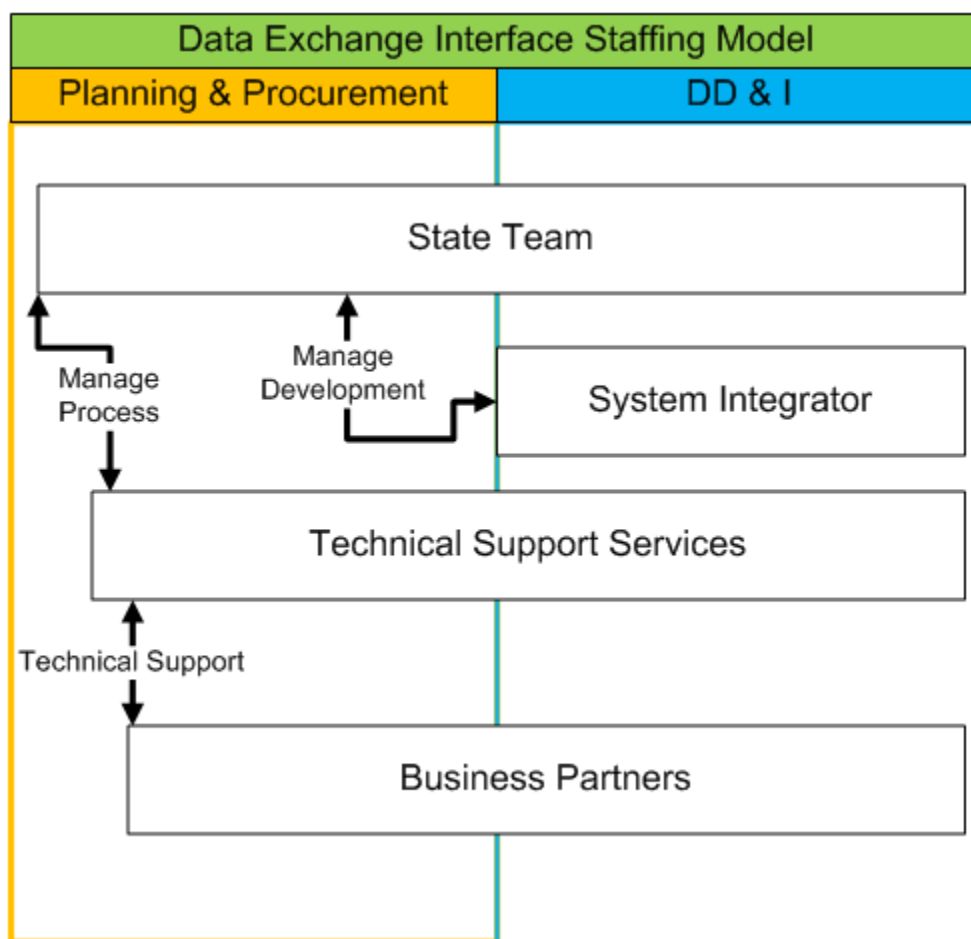
In the below Figure 8 – Technical Support Services Model, the operational relationship between the State team (OSI & CDSS), the System Integrator, the Business Partners and the Technical Support Services contractor is defined.

The State team will manage the process and activities executed by the Technical Support Services contractor, whereas the Technical Support Services contractor will conduct the data gathering and technical analysis needed to determine the technical specifications of the data exchange interfaces and interoperability concepts with the Business Partners. The Technical Support Services contractor will also assist during the technical development of the data exchange interfaces between the CWS-NS and

the Business Partners' systems by communicating problems, recommending solutions, and ensuring the interfaces are developed within scope, schedule and costs.

The State team will also manage the delivery of the data exchange interfaces and interoperability concepts by the System Integrator. Because of the wide range of skills required to successfully execute the data exchange interfaces and interoperability concepts, each of the participating parties (the State team [OSI & CDSS], the System Integrator, the Business Partners and the Technical Support Services contractor) will provide specialized skills and perspectives. With close collaboration, the assimilation of these specialized skills and perspectives will allow the State to successfully implement the data exchange interfaces. The State team will closely manage this collaborative effort throughout the DD&I Phases.

Figure 8 – Data Exchange Interface Staffing Model



5.1.6.4.2 Independent Technical Verification and Validation (IV&V) Consulting Services

Independent Verification and Validation services are needed to ensure that the CWS-NS Project is conducted using best practices and standards as per the SAM, SIMM; and California

Technology Agency IT policies, standards, instructions; and further delineated in the standards of the Institute of Electrical and Electronics Engineers (IEEE) and the PMBOK for IV&V activities.

IV&V activities provide an objective, independent, assessment of software products and processes throughout the project life cycle. This independent assessment demonstrates whether the software and system requirements are correct, complete, accurate, consistent, and testable. The processes determine whether the development products of a given activity conform to the requirements of that activity and whether the software satisfies its intended user and user needs. The determination includes assessment, analysis, evaluation, review, inspection, and testing of products and processes.

The scope of the services provided by the IV&V vendor are highly-complex, specialized and technical in nature that the necessary expert knowledge, experience, and ability are not available through the civil service system. Additionally, the IV&V vendor needs to be protected from any conflict of interest, in order to provide findings that are independent and unbiased.

Due to the complexity and fiscal impacts of the CWS-NS Project, it is critical to provide the level of support needed for the success of the project and therefore, it's in the best interests of the State to proceed with a personal services contract for IV&V services.

5.1.6.4.3 Legal Services

Independent counsel specializing in intellectual property for non-litigation legal services is necessary for information technology (IT) contract activities related to the CWS-NS Project. Given the obligations and liability of the participating vendors, the State is often challenged when negotiating software terms and conditions as well as the state's General Provisions (GPs) and Special Provisions (SPs) with the vendors. It is critical due to the size and complexity of the new solution that OSI obtains independent IT legal expertise with an intellectual property background and experience with complex statewide system contracts. The independent counsel will assist the State in developing the required contract language, providing expert consultation at the highest level, and mitigating risks during negotiations of the CWS-NS contract.

The scope of the legal services provided by the independent counsel is highly-complex, specialized and technical in nature, and the necessary expert knowledge, experience, and ability are not available through the state's civil service system.

Due to the complexity and fiscal impacts of the CWS-NS Project, it is critical to provide the level of support needed for the success of the project and therefore, it's in the best interests of the State to proceed with a personal services contract for legal services.

5.1.6.4.4 OSI/CDSS County Consultant Services

Subject Matter Expertise (SME) is required to provide consulting services to the CWS-NS. The necessary breadth of knowledge, experience and ability required to perform these services are not available through the state civil service system. The county consultant is a subject matter expert who will provide in-depth understanding of the current child welfare services program, specifically county business practices and needs. The county consultant also acts as a liaison to improve project communications

between the State and the counties and represent the counties in identifying and defining county business needs during all phases of the project.

The county consultant will serve as advocate for the county perspective and provide program expertise during the procurement phase. The county consultant, as part of the multi-disciplinary project team, will coordinate the transition from the procurement phase to the design, development and implementation phase including the subsequent rollout of the CWS-NS. It is imperative that the CWS-NS Project team understands current child welfare services business practices from the county perspective to ensure the new solution meets all of the counties' business practices and needs.

Due to the project scale, complexity, and sensitivity of the CWS-NS, it is in the best interest of the State to obtain SME's knowledgeable and experienced in child welfare services from the counties.

5.1.6.4.5 Organizational Change Management (OCM) Consulting Services

An OCM vendor, certified in Prosci's ADKAR[®] Model and OCM methodology, is required to provide expert consultation to CDSS, OSI, county workers, and other key stakeholders on the use of this OCM methodology. OCM is a critical component of any successful IT project, especially large statewide projects, as it prepares organizations and individuals for the impending changes associated with the new solution. Effective OCM is accomplished by building awareness, desire, knowledge, and ability of individuals (primarily end-users of the new solution) and the organization as a whole prior to and during the change. By integrating OCM into every phase of the project, OSI is able to identify and monitor organizational and individual change management needs and address them before they become issues. Prosci's ADKAR[®] is a best practice approach for organization change management. It is an effective, structured approach for both organization and individual change management and it also provides monitoring and assessment tools to constantly measure the performance and successfully promote change. OSI's EBT and CMIPS II projects have employed this approach as well as other projects such as FI\$Cal. The CWS-NS Project will leverage the OCM strategies from these other projects and adapt them to conform with Child Welfare Services.

The OCM vendor will work closely with the CWS-NS project team and other stakeholders to finalize the OCM strategy and plan. Once completed, the vendor will provide expert consultation during the implementation of Prosci's OCM methodology across the state. During DD&I - Phase 1 and DD&I - Phase 2, the vendor will also collaborate with the systems integrator to ensure the OCM activities are closely aligned with the design, development, and rollout activities of the new solution.

The scope of the consulting services provided by the OCM vendor is highly-complex, specialized and technical in nature, and the necessary expert knowledge, experience, and abilities are not available through the state's civil service system.

Due to the complexity and fiscal impacts of the CWS-NS Project, it is critical to provide the level of support needed for the success of the project and therefore, it's in the best interests of the State to proceed with a personal services contract for OCM services.

5.1.6.5 Contracts Exempt from Government Code Section 19130 Contracts

5.1.6.5.1 Independent Project Oversight Consultant (IPOC) Services

IPOC services are needed to ensure the CWS-NS Project is conducted using best practices and standards as per the State Administrative Manual (SAM) and Statewide Information Management Manual (SIMM). Specifically, oversight for the CWS-NS Project will follow the California Technology Agency's (CTA) IT policies, standards, instructions delineated in the Information Technology Project Oversight Framework (ITPOF) requirements and the standards of the Project Management Body of Knowledge (PMBOK).

CDSS plans to retain IPOC services from CTA through an interagency agreement. CTA will assign to the CWS-NS Project one full-time state staff at the Data Processing Manager III classification to provide these services. The interagency agreement will include a statement of work, level of responsibilities and other contracting details commensurate to the size and complexity of the project.

5.1.6.6 Small Business and Certified Disabled Veteran Business Enterprise

The CWS-NS Project will make a concerted effort to enlist Small Businesses (SB) and Disabled Veteran Business Enterprise (DVBE) by including language in all of its procurements to encourage SB participation and to achieve DVBE goals. In addition, the prime vendor procurement will be advertised on the eProcurement System to potentially allow a broader participation by SB and DVBE vendors.

5.1.6.6.1 Contract(s) Term(s)

Table 5.2 displays the contract terms of the various CWS-NS contracts.

Table 5-3- CWS-NS Contract Table

Type of Contract	Planned/ Date of Award	Start and End Date of Contract	Total Value of Contract	Is it performance based?	Competitively Awarded
System Integrator	June 2015	July 2015 – June 2023	\$108,836,528	Y	Y
Independent Project Oversight Consultant	June 2013	July 2013 – September 2017	\$543,330	N	N
Technical IV&V	June 2013	July 2013 – September 2017	\$2,371,824	N	Y
Technical Support Services	June 2013	July 2013 – September 2017	\$3,041,280	N	Y

Type of Contract	Planned/ Date of Award	Start and End Date of Contract	Total Value of Contract	Is it performance based?	Competitively Awarded
Legal Support Services	December 2013	January 2014 – December 2015	\$250,000	N	N
CDSS OCM Consulting Services	June 2013	July 2013 – September 2017	\$3,432,000	N	Y
OSI/CDSS County Consultant (IA)	June 2013	July 2013 – June 2023	\$10,836,000	N	N

Note: Alternative financing options are not being used for the contracts identified in the table above.

5.1.7 Technical Interfaces

There are information exchange interfaces that currently do not exist in CWS/CMS that will aid users and significantly enhance investigation, case management, and service delivery efficiency. Improved processes involve automated access to medical eligibility information and the ability to perform location searches for missing individuals. These information exchange interfaces will meet mandatory federal SACWIS requirements: Title IV-A – Statewide Automated Welfare Systems (SAWS), Title XIX – California Department of Health Care Services (DHCS) – MEDS, and Title IV-D –California Child Support Automation System (CCSAS).

- **SAWS Title IV-A**

An information exchange interface with SAWS will provide access to information about multiple programs and client identification when CWS has a mutual client with the California Work Opportunity and Responsibility to Kids (CalWORKS) program. The SAWS interface will enhance investigation, improve case-management services, and facilitate better service delivery by preventing duplication.

- **California DHCS MEDS - Title XIX**

An information exchange interface with MEDS will provide access to Medi-Cal eligibility verification, along with family and individual demographic information (e.g., address, telephone). This information exchange interface will provide access to client information to determine eligibility for children in foster care, supporting the automated exchange of common case information, and capturing required data for federal reporting.

- **CCSAS - Title IV-D**

An information exchange interface with CCSAS will automate the collection of child-support information. This includes the mandatory reporting of child-support data for AFCARS, as well as verification across data systems on shared client information. This information will facilitate the collection of child support on the behalf of dependent children and the automated exchange of child-support referrals. This interface will allow the CWS to access information to locate missing persons.

- **Social Security Administration**

An information exchange interface with the Social Security Administration will automate the ability to submit requests for Social Security benefits on behalf of a child. AFCARS data could be exchanged, as a result. Demographic information could also be obtained on clients who will assist in service delivery.

- **State Controller's Office and the County Payment Systems**

Information exchange interfaces with the California State Controller's Office and individual county payment systems will automate CWS financial transactions. The State and counties are required to track and manage financial information including payment of CWS service-connected expenses, administration and issuance of assistance payments, and children's income. Accurate payments help ensure children's financial needs are met.

There are many other missing information exchange interfaces critical to CWS operations. The information exchange interfaces will enhance investigation, case management, and due diligence (location) search functionality. In addition, these additional information exchange interfaces will help fulfill the needs of child welfare practice.

- Family and Juvenile Courts
- Department of Alcohol and Drug Programs
- Department of Corrections and Rehabilitation
- Department of Public Health
- Department of Health Care Services
- Department of Justice
- Department of Motor Vehicles
- Employment Development Department

All interfaces with the CWS-NS system are expected to be implemented using Web Services Adaptor architecture and The National Information Exchange Model (NIEM). The Web service adapter will provide the following capabilities:

- Messages will be housed in a secure repository with retrieval and analysis capabilities.
- Information exchange interfaces will not require human intervention.
- Each adaptor will handle all routing, security, error handling and translations for the information exchange service in a manner that conforms to the CWS-NS Project, state and federal security requirements.
- Adaptors will use a Single sign-on (SSO) capability.
- Each adaptor will have the capability for administrators to access the messages in the repository.
- Each adaptor will have the capability for administrators to configure, or change configurations of the CWS-NS Project interfaces.
- Automated notification and alert functionality will be provided for triggering events based on rules.

NIEM is an XML-based information exchange framework developed by the US federal government to facilitate the creation of automated enterprise-wide information exchanges which can be uniformly developed, centrally maintained, quickly identified and discovered, and efficiently reused. The State of California and the ACF envision NIEM as the de-facto exchange standard for the CWS-NS and its partners. Using NIEM as the standard for exchanging information between the CWS-NS Project and other agencies will facilitate the long term goal of inter-operability and cost savings envisioned by the CWS-NS Project and its sponsors.

NOTE: For additional details on the design and capabilities of the solution information exchange interfaces, refer to Appendix H – CWS-NS Technical Architecture Vision.

5.1.8 Accessibility

The proposed system will meet all accessibility requirements in Government Code Section 11135 and Section 508. Agency will be able to use industry standards and best practices to measure these accessibility requirements.

5.1.9 Testing Plan

Industry standards and best practices for both formal and informal testing is planned. Unit, integration, system and user acceptance testing (UAT) will be utilized throughout the system delivery lifecycle along with Informal testing to be executed iteratively, in a “Sandbox” environment, during DD&I - Phase 1 and DD&I - Phase 2.

Automated testing will be utilized to continuously test new capabilities, as well as execute regression testing on previously developed services or service capabilities. Automated testing will also be a critical practice in determining load and capacity capabilities of the delivered system. While traditional input/result manual testing will be utilized by the stakeholder community for system testing and UAT, the automated

testing will be used by the development/configuration staffs to expedite identification and correction of defects throughout the delivery lifecycle.

5.1.9.1 Unit Test

Unit testing will be executed at the individual service or business capability level. The goal of unit testing is to ensure that the individual service or business capability executes as designed. Unit testing is executed by the developer or development team responsible for delivery of the individual service or business capability. Completion of unit testing certifies the individual service or business capability is ready for integration into the system.

In the buy/build model, all capabilities will be developed/delivered in small increments (services), which encapsulate functionality into a single unit. This encapsulation will allow unit testing to be executed using automated testing techniques (tools, test code, scripts). Automated testing allows test scenarios (inputs, outputs and error identification) to be applied continuously during development/delivery of the service. Automated testing also provides the benefit that numerous test scenarios can be executed in minutes instead of the hours that would be required for manual testing. This test cycle is executed/managed by the system vendor and supported by the project test staff.

5.1.9.2 Integration Testing

Integration testing is the process of ensuring that individual services that have successfully passed unit testing can collaborate to support a larger business process. In a SOA environment, integration of individual services is managed by the elements of the process manager (i.e., SOA Registry, Workflow Engine and Service Broker). Prior to delivery to the SOA environment, services that will need to collaborate to support a business process should be subjected to automated simulations of those collaborations. This simulation will likely be accomplished by wrapping the automation code from the unit testing with code that exercises the collaboration. This test cycle is executed/managed by the system vendor and supported by the project test staff.

5.1.9.3 Informal Sandbox Testing

During execution of the buy/build system delivery, stakeholders will be provided access to an environment where the completed services/configuration can be reviewed and evaluated. Release of system capabilities (including high-level user training) will be managed and communicated to the stakeholder community through scheduled (i.e., bi-weekly, monthly) virtual meetings. Stakeholders will then be allowed to execute “informal testing” of the released (potentially still in development) service/capability. A feedback process will also be available to identify potential design flaws and OCM opportunities.

5.1.9.4 System Testing

System testing is focused on ensuring that all developed/delivered system services operate as designed to deliver a complete solution to the stakeholder community. During system testing, designated testing staff will manually execute structured

scenarios designed to validate the operational correctness of all known threads of execution (sequences of inputs, processing and expected results/outputs) of the system, as defined by the business practice. Testing staff are expected to execute each documented test scenario (with one or more test cases, based on their designed sequence of functional events) and record achieved results. The test scenarios for this activity also will test out-of-bounds conditions (expected to fail or return a specific incorrect result). System testing must be completed prior to execution of the User Acceptance Test (UAT) cycle, and is the gatekeeper activity prior to statewide implementation. Completion of system testing requires a thorough review of all defects identified during the system test cycle, determination of open/closed defect reports and a decision whether the impact of not correcting a defect is critical enough to delay release of the product (100 percent defect correction is seldom realistic or cost/time effective). This test cycle is executed/managed by the system vendor and supported by the project test staff.

5.1.9.5 User Acceptance Testing

The UAT test cycle is executed/managed by the State and supported by the system vendor. The successful completion of the system development/delivery and system testing cycles results in a system that is certified ready for statewide implementation. UAT is the process by which State/County staff provides confirmation (acceptance) that the system meets mutually agreed-upon requirements. UAT is most effective when executed in the production environment, rather than in a development phase environment such as the test, training or sandbox.

Where the system testing is focused on ensuring that the system meets the user needs, goals and expectations as stated in the requirements specification, UAT is focused on ensuring that the production system functionally supports the practice (from a day-to-day perspective) and fulfills the CWS-NS system contract. UAT may be executed in two cycles, where the first (rigorous) cycle is executed in a production-like environment (i.e., mirror image of the production environment including network, interfaces, data, architecture, and software version), and a second (risk focused) cycle is executed in the actual production cycle. Execution of UAT in the production environment that is not associated with actual practice execution will probably require a refresh activity after UAT and before statewide implementation.

5.1.9.6 Defect Identification, Management and Correction

The process for defect identification will follow the general process parameters of the project's change management process. However, defects identified during testing cycles will be managed collaboratively by the project and vendor test managers. After contract award, the project and the vendor will determine if the project change control board or a separate test change control board will be utilized. Regardless of the governance body and governance process utilized for defect identification during testing, management, correction and regression testing of defects will be a collaborative responsibility of the project, the vendor and designated stakeholders.

5.1.9.7 Version Control

Version control is the process of tracking and controlling changes in the software, including revision control and the establishment of baselines. As an element of the RFP process and the contract award, the project and the vendor will have to agree on the tools and process that will be utilized for version control. The project does not intend to proscribe specific version control tools or process, but rather allow the vendor to recommend tools and process that best support execution of the system delivery. There is the expectation that any recommended version control approach will align with the project's Configuration Management and Change Management plans.

Version control is expected to track changes to:

- Configuration files, parameter files, initialization files. This gives system administrators another way to easily track changes made and a way to roll back to earlier versions should the need arise.
- Documentation, giving the project and its administrators a single source for information about the application.
- Design documents, which will grow and change as the application is built out.
- Any other information or documents that the project needs to track as part of the software development life cycle.

The software solution will be delivered through 32 increments. These increments will include computing environments (i.e., development, test and production), software services, testing, training and deployments. Because each increment will result in a fully functional service(s), appropriate unit, integration and (where applicable) system testing cycles will be executed. Acceptance testing will be provided with each increment and User Acceptance Testing (UAT) will be executed prior to the deployments during DD&I - Phase 1 and DD&I - Phase 2.

Both formal and informal testing activities will be utilized. Formal testing activities will be executed by identified test teams, and will use test scenarios/scripts to verify/validate the delivered software. Defects will be documented, reviewed, accepted/rejected and tracked to closure by the test manager/test coordinator. Informal testing will be executed on an as-desired/as-available basis by project team and user populations in the Sandbox environment. Items that are identified for possible correction/consideration will be submitted informally to the project. The project will review all informal submissions and disposition as appropriate for formal or informal response. Formal responses will result in introduction into the defect management process.

5.1.10 Resource Requirements

5.1.10.1 Project Staffing Approach

The Child Welfare System New System (CWS-NS) Project staffing approach was based on the Office of Systems Integration's (OSI) best practices and the current staffing level of Child Welfare Services/Case Management System (CWS/CMS).

With regard to the OSI best practices, the models used to staff project core teams were developed by an OSI workgroup, which included representatives from the OSI PMO, CWS/CMS, EBT, UIMOD, SAWS, OSI Administrative Services, and OSI Acquisition and Contracting Services. The workgroup reviewed current and historical staffing information from all OSI projects. The group also obtained and reviewed the Franchise Tax Board's Enterprise Architecture Definition Business Process Management (BPM) v3.3 and also its BPM Best Practices document. In addition, the workgroup obtained staffing information from the very large CCSAS Project managed by the California Department of Child Care Services as well as organization charts from some of California's other large, complex projects.

The models were developed for each of three lifecycles which may be part of an OSI project's life: Project Funding/Acquisition, System Development, and Maintenance & Operations. The models were also organized by functional groupings. The functional groupings and functions were drawn from the PMBOK, ITIL v.3 (see ITIL Roles), the California Project Management Methodology, the Center for Project Management, and relevant IEEE standards (e.g. 1028, 1058.1, and 1074). The focus of the models was on the staffing required for the core IT team, and not the business program team, executive management or other supporting entities.

The following reflects the benefits of the OSI best practice staffing models:

- Establish a standard project organization structure for justifying the resources and funding for new and continuing projects
- Provide a consistent acquisition pattern for the vendor community
- More efficient use of resources both in projects and centralized services
- Justification for resources/positions in project approval documents/budgets
- Requirements for acquisition documents
- Task descriptions for duty statements

Roles and responsibilities may be performed by state staff, contractor staff, or a combination of both, depending on a project's needs.

As mentioned earlier, the OSI best practice staffing models are derived from a cross-section of several IT projects. They represent general standards in developing staffing plans for a core team based on the size and complexity of a given project. However, variations in the number and types of staff required may vary from one project to another depending on the solution, application development approach and other pertinent factors such as time.

For additional information on OSI's project staffing approach, please go to <http://www.bestpractices.osi.ca.gov/ProjectCoreTeam/Overview.shtml>.

In order to substantiate the staffing level proposed for the CWS-NS Project, OSI performed a comparison between the staffing levels of the CWS-NS Project, the OSI

Best Practices models and the Employment Development Department's Accounting and Compliance Enterprise System (ACES) Project. The tables below show the functional areas which were used to classify staffing levels followed by an analysis of each functional area table.

TABLE 5-4 - ADMINISTRATIVE

Functional Areas	Classifications	OSI Best Practices	CWS New System	ACES
Deputy Director	CEA		1	1
Administrative Assistant	TA I			1
Executive Assistant	EA		1	
Asst. Deputy Dir/Project Director	DPM IV		1	1
Project Mgt Chief	DPM III		1	
Tax Program Project Manager	TA III			1
Administrative Support	OT		1	2
TOTALS		12	5	6

In the functional area of Administration, the CWS-NS Project has a total of five staff in comparison to the ACES Project which has a total of six staff. The difference is the extra staff accountable to Administrative Support in ACES.

TABLE 5-5 - PROJECT MANAGEMENT

Functional Areas	Classifications	OSI Best Practices	CWS New System	ACES
Fiscal/Contracts Mgr	DPM II		1	1
Procure/Cont Analyst	Sr.ISA		1	
Procure/Cont Analyst	SISA		1	
Fiscal/Procure/Cont Analyst	SISA/TAI		1	1
Fiscal Analyst	AGPA		1	1
Sr. PMO Analyst	Sr.ISA		3	3
Configuration Mgt Analyst	SISA		1	1
QA Analyst	SISA		1	1
PMO Analyst/Scheduler	SISA		1	1
TOTALS		9	11	9

In the functional area of Project Management, the CWS-NS Project shows a total of eleven staff in comparison to nine staff for ACES; however, in the Program/Business functional area for ACES there are two more staff performing contracts and benefits

support (see Program/Business Table below). This makes the two projects' staffing levels equitable in the functional area of Project Management. Also, ACES procured and managed a total of four contracts while CWS-NS Project will be procuring and/or managing a total of eight vendor contracts as well as eleven county consultant contracts.

TABLE 5-6 - APPLICATIONS DEVELOPMENT & IMPLEMENTATION

Functional Areas	Classifications	OSI Best Practices	CWS New System	ACES
Application Mgr	DPM II		1	1
Design Analyst	AISA		1	
Design Analyst	SISA		1	1
Test Lead	Sr.ISA			1
Test Analyst	SISA		1	2
Test Analyst	AISA		1	
Design Test Mgr	DPM I		1	
Bus/Req Analyst	Sr.ISA		1	
Sr. Release Analyst	Sr.ISA		1	
Release Analyst	AISA		1	
Sr. Programmer	Sr.PA			2
Application Programmers	SPA			5
Sr. Software Developer	SSSIII			1
TOTALS		26	10	13

In the functional area of Applications Development & Implementation, the CWS-NS Project has a total of ten staff in comparison to the ACES Project which has a total of thirteen staff. The difference of three staff is related to the programming staff used by ACES.

TABLE 5-7 – CUSTOMER RELATIONS

Functional Areas	Classifications	OSI Best Practices	CWS New System	ACES
Customer Relations Mgr	DPM II		1	
System Support Analyst	SISA		6	
TOTALS		6	7	0

The Customer Relations functional area is unique to CWS/CMS. These seven staff support the counties by providing outreach for CWS which includes technical support, program training and organizational change management. A comparable area in ACES would be in the Program/Business functional area. The ACES Project includes nine staff that are involved in OCM, communications/outreach and training in the Program/Business functional area.

TABLE 5-8 – TECHNICAL ARCHITECTURE & INFRASTRUCTURE

Functional Areas	Classifications	OSI Best Practices	CWS New System	ACES
Technical Chief	DPM III		1	1
Solution Engineer	SSS III			1
Database Developer	SSS II		2	1
Operations Mgr	SSS III Sup		1	
Systems Architect/Lead Architect	SSS III		1	1
Sr. Infrastructure Eng	SSS III			2
Infrastructure Eng	SSS II		1	1
Infrastructure Eng	SSS I			3
Security Admin	SSS II		1	
Web Analyst	SISA		2	
TOTALS		16	10	10

In the functional area of Technical Architecture & Infrastructure, the CWS-NS has a total of ten staff in comparison to the ACES Project which also has a total of ten staff.

TABLE 5-9 – PROGRAM/BUSINESS

Functional Areas	Classifications	OSI Best Practices	CWS New System	ACES
Program Mgr	SSM III		1	
Project Support Mgr	SSM II		1	
Business Program Mgr	SSM I		1	
Program Support Mgr	SSM I		1	
Oversight Analyst	Sr.ISA		1	1
Fiscal Analyst	AGPA		1	
Contract & Admin Analyst	AGPA		1	
SACWIS Analyst	AGPA		1	
Business Analyst	AGPA		1	
Adoptions Specialist	SSC III		1	
CWS Program Specialist	SSC III		1	

Functional Areas	Classifications	OSI Best Practices	CWS New System	ACES
Admin Assistant	OT		1	
Legal Counsel	Staff Counsel III		1	
Functional Line Managers	TAI			12
Functional Program Managers	TA II			3
Benefits Measurement and Project Support Manager	TA II			1
Organizational Change Management Project Manager	TA III			1
Collection Analyst	Sr.TCR			6
Audit Analyst	TAU III			3
Accounting Analyst	AO II/III			6
Organizational Change Manager	TA1			1
OCM Agent	Sr.TCR			2
Communications/Outreach Manager	TA1			1
Communications Analyst	Sr.TCR			2
Training Manager	TAI			1
Trainers	Sr.TCR			2
Data Conversion & Interfaces Analyst	Sr.TCR			2
Contracts and Benefits Analyst	Sr.TCR			2
TOTALS		N/A	13	45

The CWS-NS Project plans to use 13 state staff along with county representatives and contractors, which is not shown in the table above, to perform the required program and business activities including organizational change management, communications, training, data conversion, and other activities.

TABLE 5-10 – STAFFING GRAND TOTALS

Functional Areas	Classifications	OSI Best Practices	CWS New System	ACES
GRAND TOTALS			56	83

Using this project staffing approach, OSI plans to leverage existing state staff from the CWS Automation Study Team (CAST) and redirect existing state staff from CWS/CMS Maintenance and Operations (M&O) to minimize the need to hire new staff while reducing the risk of having a lack of skilled resources on the project when they are required. As the new system is in development, changes to the existing system will be curtailed, with the exception of mandated legislative changes. This will enable staff to transition to the new system project without effecting current maintenance and

operations workload. If workload is impacted on the current system, limited term positions may be necessary to handle the workload. This approach also assumes that if sufficient qualified resources are not available within the state workforce, skills will be developed through training of existing state staff, recruited through hiring new state staff, or contracted through consulting services (i.e., vendors) as the last resort. In addition, limited term positions will be requested by CDSS for the new system project to support the business related activities on the project. These positions will no longer be needed after the system goes into full production. This approach is consistent with the Governor's 2012 May Revision that states:

"...Reduce Reliance on External Contracts – To achieve savings, the Administration will reduce its use of external state contracts. Specifically, it will decrease vendor support for information technology oversight by developing professional expertise in the state workforce. In addition, the Department of General Services, in consultation with departments, will evaluate all personal services contracts, including janitorial and security services, and transition that work to state employees where appropriate..."

There are four separate but integrated organization charts for the CWS-NS project (see Appendix C, Project Organization Chart). They cover the progressive phases of the project, which are:

- The Planning and Procurement phase.
- Design, Development and Implementation – Phase 1.
- Design, Development and Implementation – Phase 2.
- The Maintenance and Operations phase.

The organizational charts include the following key staff resources:

- Redirected staff from the current OSI, CWS/CMS M&O
- Redirected staff from the OSI, CAST
- New permanent state staff for OSI
- New limited term state staff for OSI
- Redirected staff from CDSS, CMS Support Branch
- Redirected staff from CDSS, CAST
- New limited term state staff for CDSS
- County Consultants
- Consulting services

- *Organizational Change Management (OCM)* – To provide expert consulting in planning and implementing best practices and a proven framework for OCM.
- *Technical Support Services* - To provide expert technical design, development and support for external interfaces.
- *Independent Project Oversight (IPOC)* – To provide independent oversight for project management processes and procedures as required by SIMM.
- *Independent Verification and Validation (IV&V)* – To provide independent verification and validation for information technology design, development and deployment as required by SIMM.
- *Intellectual Property (IP) Legal Services* – To provide IT legal expertise in intellectual property as well as expertise in negotiating terms and conditions, general provisions, and special provisions of the contract.
- *Independent Project Oversight (Interagency Agreement with CTA)* – To provide independent oversight for project management processes and procedures as required by SIMM.

Table 5.4, CWS-NS State Staffing by Project Phase, shows the number of redirected staff, new permanent staff, and new limited term staff across the project's four phases.

Table 5-11 - State Staffing by Project Phase

Origin of Staff Resources	Planning & Procurement Phase	DD&I - Phase 1	DD&I - Phase 2	M&O Phase
OSI – Redirected from CWS/CMS	2	11	25	25
OSI – Redirected from CAST	10	10	10	10
OSI – New Permanent	5	5	5	5
OSI – New Limited Term	3	3	3	0
CDSS – Redirected from CMS	0	0	0	13
CDSS – Redirected from CAST	3	3	3	3
CDSS – New Limited Term	10	10	10	0
Total Project Staffing	33	42	56	56
Net Redirected Staffing	15	24	38	51
Net New Permanent Staffing	5	5	5	5
Net New Limited Term Staffing	13	13	13	0

5.1.10.1.1 Planning and Procurement Phase

The Planning and Procurement Phase will occur from July 2013 through June 2015. During this phase, the project estimates a total of thirty-three (33) state staff, six (6) county consultants and five (5) consulting contracts as previously described. Of the thirty-three state staff, fifteen (15) are redirected staff, five (5) are new permanent staff, and thirteen (13) are new limited term staff. All thirty-three state staff will start working on the CWS-NS project on July 2013, except for the two (2) redirected staff from CWS/CMS. These two (2) staff will start working on the project on July 2014. The OSI and CDSS Workload Analyses of the five (5) new permanent staff and the thirteen (13) new limited term staff are shown in Appendix N, OSI and CDSS FY 2013/14 Budget Change Proposal Workload Analysis.

5.1.10.1.2 Design, Development and Implementation - Phase 1

The Design, Development and Implementation (DD&I) - Phase 1 will occur from July 2015 through September 2016. During this phase, the project estimates a total of forty-two (42) state staff, eleven (11) county consultants, and five (5) consulting contracts. Of the forty-two (42) state staff, twenty-four (24) are redirected staff, five (5) are new permanent staff, and thirteen (13) are new limited term staff.

The staff redirected from CWS/CMS to the CWS-NS Project has been matched to positions with relatively equivalent skill sets and knowledge. The CWS/CMS workload should curtail during this transitioning period; thus allowing the staff redirection to occur without impacting the current system's maintenance and operations. If the workload does not decrease, CWS/CMS will hire limited term positions, as needed, to maintain system continuity during this time period.

5.1.10.1.3 Design, Development and Implementation - Phase 2

The Design, Development and Implementation - Phase 2 will occur from Sept 2016 through Aug 2017. During this phase, the project estimates a total of fifty-six (56) state staff, eleven (11) county consultants, and five (5) consulting contracts. Of the fifty-six (56) state staff, thirty-eight (38) are redirected staff, five (5) are new permanent staff, and thirteen (13) are new limited term staff.

As with the previous phase, the staff redirected from CWS/CMS to the CWS-NS Project have been matched to positions with relatively equivalent skill sets and knowledge. The CWS/CMS workload should curtail further during this transitioning period; thus allowing the staff redirection to occur without impacting the current system's maintenance and operations. If the workload does not decrease, CWS/CMS will hire limited term positions, as needed, to maintain system continuity during this time period.

5.1.10.1.4 Maintenance and Operations Phase

The maintenance and operations phase will occur from September 2017 until the next new system solution is implemented in the future. During this phase, the project estimates a total of fifty-six (56) state staff and two (2) county consultants. The five (5) consulting contracts will not be required during this phase. Of the fifty-six (56) state staff, fifty-one (51) are redirected staff, and five (5) are new permanent staff. Thirteen

(13) new limited term state staff will no longer be needed. Of the 56 state staff, 40 are OSI staff and 16 are CDSS. The 40 PYs estimated for M&O is based on similar projects of size, complexity and scope. The CWS-NS M&O model uses a state supported system with knowledge transfer from the software vendor and prime integrator and a limited maintenance contract for vendor support. Two projects that have comparable staffing during maintenance and operations include:

- **Employment Development Department – Accounting and Compliance Enterprise System (ACES)** – This is a Commercial-Off-The-Shelf solution similar to what is being proposed for CWS-NS. This solution utilized 88 percent of the functionality out-of-the box with the remaining being built as custom extensions (referred to as site specific code) similar to the approach for CWS-NS. The project covered a five year period from inception in July 2006 through system acceptance in July 2011. In order to keep the system up to date, ACES implements quarterly service packs which require substantial resources for analysis, testing and implementation activities. In order to adequately staff for these activities and ensure adequate knowledge transfer, their M&O consists of 42 Tax Branch staff of varying classifications based on functional area and an additional 35 Information Technology Branch (ITB) staff. IT staff support programming, application development, database administration, system administration, operations, training and data warehouse. The 40 CWS-NS staff is comparable to the 35 EDD ITB staff. Note that ACES has approximately 1,500 users and CWS-NS has approximately 22,000 users statewide.
- **Department of Social Services – Child Welfare Services/Case Management System (CWS/CMS)** – The current legacy system is supported by 49.5 state PYs. These staff resources support application analysis, design, development, testing, and training for upgrades and new releases, web services, customer support, operations, and fiscal reporting. The staffing numbers do not include staff who works for the prime vendor which is under contract with the State to support and maintain the system. CWS/CMS has approximately 22,000 users statewide which is the same user base for CWS-NS.

The 40 PYs are an estimate only at this time. As we learn more about the vendor software and solution, these staffing estimates may change and a subsequent Special Project Report will be submitted to reflect changes. Refer to Appendix C - CWS-NS Organizational Charts.

5.1.11 Training Plan

Like testing, training is expected to be a combination of informal and formal processes/activities during the entire development/delivery cycle. The informal training is planned to be executed iteratively, in a “Sandbox” environment, during DD&I - Phase 1 and DD&I - Phase 2. Formal user focused training will be executed in a traditional production-like test environment in the month(s) prior to release of each DD&I phase. During execution of the buy/build system delivery, users will be provided access to an environment where the completed services/configuration can be reviewed and evaluated. Incremental releases of system capabilities will be managed and

communicated to the counties (both Child Welfare and Probation) and CDSS through scheduled (i.e., bi-weekly, monthly) virtual meetings. Associated with the service/capability releases, high-level user training support will be provided through virtual meetings, on-line training aids and OCM staff. A feedback process will also be available to identify potential design flaws in the training support model and materials, as well as OCM opportunities. Use of a sandbox environment will allow users to become familiar with the solution as it evolves over a period of time, provide feedback during the process and help ensure acceptance prior to the release of service components into production.

5.1.11.1 Sandbox Training

During execution of the buy/build system delivery, stakeholders will be provided access to an environment where the completed services/configuration can be reviewed and evaluated. Incremental releases of system capabilities will be managed and communicated to the stakeholder community through scheduled (i.e., bi-weekly, monthly) virtual meetings. Associated with the service/capability releases, high-level user training support will be provided through virtual meetings, on-line training aids and OCM staff. A feedback process will also be available to identify potential design flaws in the training support model and materials, as well as OCM opportunities. Use of a sandbox environment will allow users to become familiar with the system as it evolves over a period of time, provide feedback during the process and help ensure acceptance when the product is released to production. The sandbox environment is planned to be available for on-going user discovery and informal training from August 2015 – October 2017.

5.1.11.2 Formal User Focused Training

As new functionality is added, stakeholders/county users will be able to participate in the design, testing and training processes without having to leave their county office.

The baseline training model is expected to follow a “self-training” paradigm, with on-line training as the primary delivery model. The training plan anticipates the need to provide “Train-the-Trainer” (TTT) to the Regional Training Academy’s and County based trainers to support and facilitate one-on-one training at the county level in advance of initial and ongoing implementations.

Because system access will be through the internet, training labs can be established at county designated locations, if collaborative county level training (TTT lead) is desired. This would focus on expanding and refining web-based and self-directed interactive training to increase the amount of overall stakeholder/user training participation.

The planning and execution of this formal user focused training will occur in parallel with DD&I - Phase 1 and DD&I - Phase 2. The DD&I - Phase 1 cycle will be executed between October 2015 and August 2016. The DD&I - Phase 2 cycle will be executed between August 2016 and September 2017.

5.1.11.3 The Training Environment

A centrally hosted Training and Knowledge Management environment will be available (separate from the sandbox) and will mirror the production environment including network, data, architecture, and software version. The training environment will also require the following:

- A specific data set built for training purposes must be available at all times to the training environment. This is a specially compiled set of data that allows the various users, offices, and resources to train personnel to use the CWS-NS Project.
- The ability to refresh, alter and remove personally identifiable data in the training dataset to make it relevant to the training to be accomplished.
- The ability to manage the system date and time to emulate different time periods.
- The capability to manage and track the various training databases and versions.
- Limit the administration of the training environment to authorized users.
- The ability to release functionality to the training environment prior to release in the production environment and retain the old version.

5.1.12 On-going Maintenance

An SI will be needed to implement the solution and build, integrate, and deploy any custom-built services. The SI will provide maintenance and operation services for the term of the contract.

The SI and the State will negotiate and approve a Service Level Agreement (SLA) that addresses the following performance areas:

- End-to-End Response Times (system performance)
- Capacity (system growth adaptability)
- Availability (resilience to component failure and ability to perform maintenance)
- Disaster Recovery (ability to recover at an alternate site)
- Reliability and Integrity of Data (security and backup/recovery practices)
- Incident Resolution (Service Desk and issue resolution performance)
- Enhancement Processing and Timeliness (Enhancement request timeliness)
- Any augmentations

The SI will provide to the State, 60 calendar days following the completion of the implementation phase, an updated SLA with any suggested modifications based on experience gained in terms of system service level needs and responses.

The SI will submit a final SLA to the State incorporating any state approved changes for review and acceptance by the State.

The SI will review on a monthly basis with the proposed solution project office performance against SLA provisions to determine the need for any State Credits.

The applicable warranties and maintenance agreements for the proposed system will utilize industry standards and best practices to manage these agreements.

5.1.13 Information Security

The proposed system will provide sophisticated role-based security and assignment that allows each CWS worker access to all data and information needed to do the work, yet at the same time ensure that sensitive information can only be accessed by authorized personnel. The system is expected to have the capability to manage roles and security of CWS workers.

Since the system will contain information that is highly sensitive in nature, the security framework will offer end-to-end protection with compliance reporting across users, data, applications and physical infrastructure. The security framework will provide:

- Identity and access assurance with efficient user lifecycle administration and access controls as well as integrated data auditing and application security. This will provide fine grained application entitlements, centralized security policy management and centralized encryption key lifecycle management security management for the application platform, enhanced security administration, user management and compliance reporting with automated user activity monitoring, tracking, reporting and remediation.
- The proposed system will provide a security threat mitigation solution. This end-to-end risk management solution will protect against the latest threats while reducing the costs and complexity of security.
- Finally the proposed system will be built on a technology that will help achieve faster endpoint management with minimum system administration.

5.1.13.1 Confidentiality

The proposed system will contain information that is highly confidential in nature. A security framework will offer end to end protection in compliance with the confidentiality requirements associated in the proposed system. In addition to the security framework, confidentiality requirements will be met by the following:

5.1.13.2 Data Encryption

Advanced Encryption Standard (AES) is the proposed system specification for the encryption of electronic data. Adopted by the U.S. government and is now used worldwide and supersedes Data Encryption Standard (DES).

5.1.13.3 Secure Connection

Hypertext Transfer Protocol Secure (HTTPS) combines Hypertext Transfer Protocol (HTTP) with Secure Socket Layer (SSL) protocol, which would provide encrypted communication and secure identification of a network web server in the proposed system. HTTPS connections in the security framework would run from the counties to the application in the State Data Center. This type of connection is often used for sensitive data transmissions on the World Wide Web as well as sensitive transmissions within an organization's information systems.

5.1.13.4 Two Factor Authentication

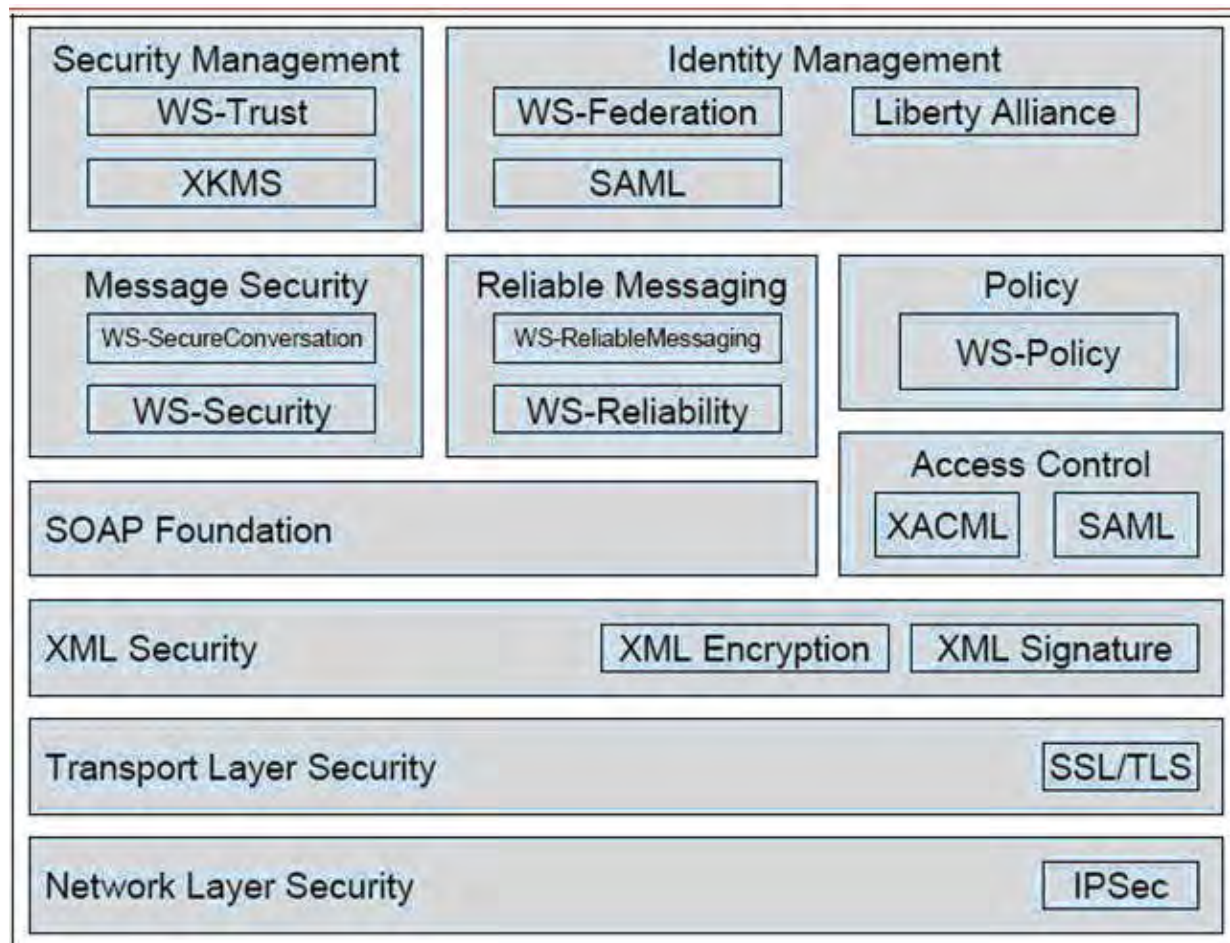
Used in the system security framework. This approach to authentication requires the presentation of two different kinds of evidence that someone is who they say they are. It is a part of the broader family of multi-factor authentication, which is a defense in depth approach to security.

As the CWS-NS Project moves to an online, shared services environment it is imperative that it implement a security system that ensures only authorized users get access to services that contain sensitive information. For the State, this includes SOA security and a federated identity management system.

5.1.13.5 Federal Guide to Web Services Security

The Federal government has released the Federal Guide to Web Services Security (NIST 800-95). This is a detailed document that explains the many parts of federated identity management. The CWS-NS Project identity management model should be compliant with this federal guide. Included is this chart that shows the major standards grouped by function.

Figure 9 - Federal Security Standards Model



There are three main security elements to the federal model:

- XML Encryption (W3C standard) is used to achieve Web service message confidentiality. This standard can be implemented using either SAML or X.509 certificates.
- XML Signature (W3C standard) is used to achieve Web service message integrity. This ensures that the message came from where you think it came from and was not hijacked (or altered) along the way. Again, either SAML or X.509 certificates can be used.

- WS-Security, WS-Federation, SAML, WS-Trust, and WS-Policy (all OASIS standards) are the primary standards for managing authentication. Web Services Security (WS-Security) ensures end-to-end security instead of point-to-point (like SSL).

The CWS-NS Project envisions that these elements will be included in the CWS-NS Project Identity Management functions.

5.1.13.6 The CWS-NS Project Identity Management Key Points

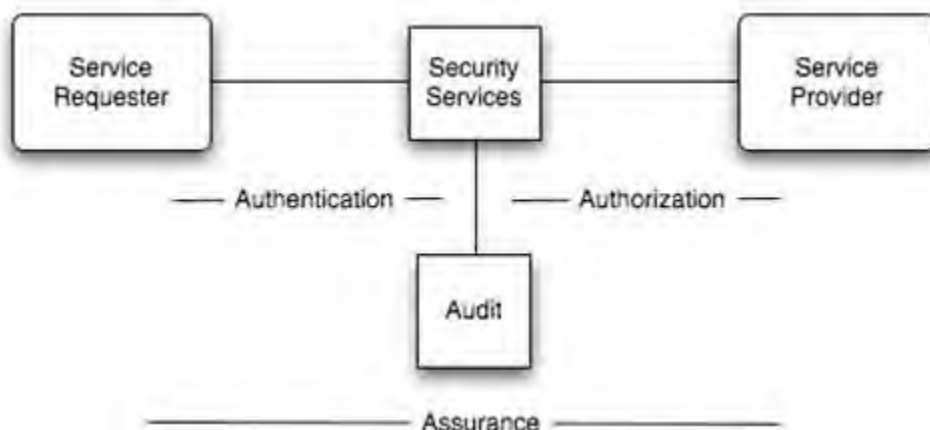
There are several key factors or points that must be met to achieve the type of identity management that the CWS-NS Project envisions. Such an Identity Management system must:

- Be consistent with federal standards and guidelines.
- Be designed to accommodate all stakeholders (as identified in the RFP).
- Support information sharing both public and private.
- Be subject to data sharing policies.
- Manage users in a consistent way with authentication at the level specified by the services they are accessing.
- Have extensive auditing capability of both user access details as well as the data they accessed.
- Have interoperability standards that are defined; in most cases, communications will be via SOAP (v1.2+) messaging, data will be formatted in XML, and services will have Web service interfaces.
- Allow for a SOA environment that is designed to handle online interactions via voice or Web channels using the same services and interoperability processes.
- Have SAML as the preferred mechanism for formatting identity information. Stakeholders may use either WS*, SAML, or CardSpace to share the identity information (subject to sharing policies).

5.1.13.7 Authentication and Authorization

Authentication is the process of establishing who a person is. Authorization is the process of determining a set of permissions that will be granted to a specific trusted identity. Authorization follows authentication. Once an identity is known, the CWS-NS can determine what the appropriate level of access is for any user.

Figure 10 - The CWS-NS Authorization Model



5.1.13.8 The CWS-NS Authentication

There are a number of methods for providing authentication. The most common process is a two way matching process between a public identifier (i.e. a user name or user id) and a private identifier (i.e. a password). For the CWS-NS, the user id/password combination is the most practical to avoid the pitfalls of managing physical devices (such as a device that would maintain a certificate or a key to identify a user). The goal of the authorization process is to enable any person to come to the CWS-NS and establish a set of credentials which can be used to identify themselves - without waiting for the access or sign on to be mailed to them. This method is also hardware independent and portable because with a user id/password, the CWS-NS can be accessed regardless of the machine being used or carrying a device with the certificate.

The purpose of authentication is to establish a trust relationship between a provider of services and a consumer of services. Since the CWS-NS may never physically meet the user, some mechanism is needed to certify that the person on the other end of the internet is who they claim to be. Without that trust, it is very difficult to enable access to restricted resources, information or processes.

The requirements for establishing an authenticated identity are standard and straight forward. It is possible to define a process for creating "an online account". In doing so, no special data is needed to establish the right to access any specific functionality. This creates enough uniformity to place the user credentials in a central repository, specifically for the CWS-NS.

Authentication also comes with a specific set of processes that should be universally available to the CWS-NS users:

- Requesting an ID
- Validating an associated e-mail address
- Creating a password

- Applying a policy for passwords
- Forgot User ID
- Forgot Password
- Resetting passwords
- Changing passwords (depending on policy)

5.1.13.9 Authentication Levels

The Federal Electronic Authentication Guide (NIST 800-63) defines four levels of authentication as well as a risk assessment guide for mapping services to the appropriate authentication level:

- **Level One – Basic.** User ID and Password via a simple password challenge-response protocol is the normal implementation at level one.
- **Level Two – Single Factor.** Shared secrets (Pet's name,, mother's maiden name, favorite color, etc.) are used to further verify a user's identity. Authentication is conducted by an Identity Service Provider via a secure authentication protocol, as defined in WS-Security (such as SAML), and a security credential ("token") are required.
- **Level Three – Multi-factor.** Authentication (via an Identity Service Provider) requires that the claimant prove through a secure authentication protocol that he or she controls the token (usually by a digital signature), and must first unlock the token with a password or biometric, or must also use a password in a secure authentication protocol to establish two factor authentication. Tokens must be one of three types: "soft" cryptographic, "hard" cryptographic or one-time password devices.
- **Level Four – Only "hard" (physical hardware) cryptographic tokens are allowed.** These are often "smart cards" that contain biometric information.

The CWS-NS envisions a data classification process will be done where an initial security level will be set. The security level will be verified by a final risk assessment performed by the State.

5.1.13.10 Authorization

Authorization is the process of determining a set of permissions that will be granted to a specific trusted identity.

- Granting permissions may happen automatically once authentication is established.
- In the case of the CWS-NS, an authenticated user may first need to establish a valid business reason for obtaining specific permissions.

- Additional data may be required to determine the basis of the permissions - things like the existence of a contract, connection to a specific case or process, or an involvement with a case or client of the CWS-NS application.

The CWS-NS envisions the use of SAML as a standard in the authorization process

5.1.13.11 Identity Management

Identity management (IdM) deals with identifying individuals in a system and controlling access to the resources in that system by placing restrictions on the established identities of the individuals. This will involve the following processes as part of the CWS-NS:

- Management of identities
 - Provisioning/De-provisioning of accounts
 - Workflow automation
 - Delegated administration
 - Password management
 - Self-service password reset
- Access Management
 - Policy-based access control
 - Enterprise/Legacy Single sign-on (Enterprise/Legacy SSO)
 - Web Single sign-on (Web SSO)
 - Role-Based Access Control (RBAC)
- Directory services
 - Identity repository (directory services for the administration of user account attributes)
 - Metadata replication/Synchronization
 - Directory virtualization (Virtual directory)

5.1.13.12 Management of Identities

The CWS-NS system will manage identity data for two broad kinds of users:

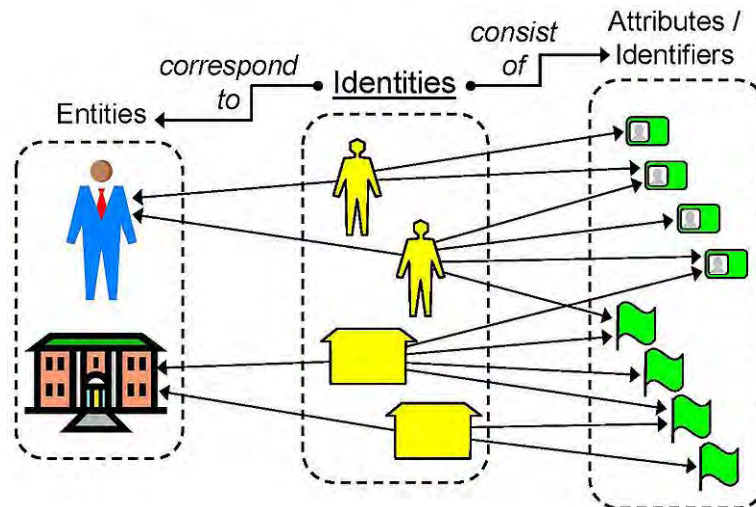
- Internal: including state and county employees and service providers. These people will spend many working hours engaged with the CWS-NS. They often access multiple functions and their identity profiles are relatively complex.
- External: including the reporting public, mandated reporters and other partners and information suppliers. There may be more external users than internal users. External users generally access narrow portions of the system (i.e., mandated reporting) and do so frequently to provide updates. Identity

profiles of internal users tend to be less complex and detailed than internal user profiles.

In the CWS-NS, the managing identities process will do the following:

- Establish an identity:
 - Link a name (or number) with the subject.
 - Re-establish the identity (i.e. links a new or additional name, or number, with the subject).
- Describe the identity:
 - Optionally assign one or more attributes applicable to the particular subject to the identity.
 - Re-describe the identity (i.e. changes one or more attributes applicable to the particular subject).
- Follow identity activity:
 - Record and/or provide access to logs of identity activity
 - Optionally auto-analyze behavior patterns of the identity

Figure 11 - The CWS-NS Identity Management Model



- Destroy the identity.

5.1.13.13 Access Management

Access management refers to the process of controlling and granting access to satisfy requests. This process is completed through a sequence of authentication, authorization, and auditing actions. Together, authentication, authorization, and auditing are also commonly known as the gold standards of security.

There are three key technical issues to be handled in the CWS-NS security design for integrating authentication, authorization, and auditing mechanisms into the application architecture:

- Single Sign-On (SSO)
- Trust and Federation
- Auditing

5.1.13.14 Single Sign-On (SSO)

A CWS-NS user will not have to login multiple times in order to gain access to the various business applications and processes that they use in their jobs. Because of the intractable problems that multiple identities present, the concept of SSO is envisioned for CWS-NS identity management.

5.1.13.15 Web SSO - Web Access Management / Web Single Sign On

For the CWS-NS, a Web Access Management (Web AM)/Web Single Sign-On (Web SSO) system is envisioned as being used to manage authentication and authorization of users accessing the web-enabled application and its processes.

In this context, a Web SSO system intercepts initial contact by the user's web browser to the CWS-NS system and either verifies that the user had already been authenticated or else redirects the user to an authentication page, where the user may use a password, token, PKI certificate or other method to be designed to authenticate the user.

Once a user is authenticated, the Web AM component of the CWS-NS controls the user's access to application functions and data. This is done either by filtering what content the user can access (e.g., URL filtering) and by exposing an API that the application can use to make run-time decisions about whether to display certain forms, fields or data elements to the user.

Web SSO/Web AM typically uses an LDAP directory as a back-end repository, to identify all users. They must be tightly integrated with the "identity and access management" application, which enables delegated and in some cases self-service administration of the contents of that single directory.

5.1.13.16 Federated Sign On

The CWS-NS will interface with many other agencies, both inside and outside the state. To do this, the CWS-NS envisions the use of a federated sign-on which requires the application authentication infrastructures to understand trust relationships and

interoperate through standard protocols. Federated sign-on means that the authentication responsibility is delegated to a trusted party, in this case the CWS-NS system itself. Application users need not be prompted to sign-on again as long as the user has been authenticated by a federated (i.e. trusted) authentication infrastructure component.

5.1.13.17 Trust and Federation

As mentioned in the Single Sign-On section, federation offers a form of SSO solution and is envisioned as part of the CWS-NS application. However, federation is more than just SSO. Federation implies delegation of responsibilities honored through trust relationships between federated parties. There are three technology elements that are crucial to the concept of federation:

- A federation protocol that enables parties to communicate.
- A flexible trust infrastructure that supports a variety of trust models.
- An extensible policy management framework that supports differing governance requirements.

A basic policy management framework must allow policies to be created, deleted, modified and discovered. In order to promote federated systems that enable new business connections and partnerships to be quickly integrated, the policy management framework must also be extensible to reflect the dynamicity of the environment it aims to support. Some examples of application policies that are relevant to federation are:

- Trusted issuer of identity-related capabilities.
- The types of capabilities required to invoke an application's operation.
- The kinds of identity information that the application expects in capabilities.
- The kinds of privileges that an identity must demonstrate in order to invoke a service.

All of these are envisioned as being dealt with as part of a federated CWS-NS security solution and must follow California identity management guidelines.

5.1.14 Impact on End Users

The anticipated impact of the new system on its end users will manifest in some change to work activates like the elimination of manual processes through automation and a centralization of tasks in the proposed system rather than disparate systems. This will require additional end user training developed by the system vendor as described above in Section 5.1.11 Training Plan.

The proposed solution will automate many time-intensive manual processes; this automation will allow CWS-NS staff to better manage clients. Potential impacts include:

- It is anticipated that Business Process Re-engineering (BPR) will be required. The process will initiate with the program and stakeholder community evaluating their current business practice for potential efficiencies and existing

practice redundancies. The vendor of the purchased product will analyze their product offering against the business practice and communicate where there are gaps that will need to be addressed. Wherever possible, the program and stakeholder community will realize the greatest cost efficiencies by facilitating adaptations of the business practice processes to align with the purchased product capabilities. When business practice process adaptations are not feasible, a custom service(s) will need to be developed to close the functional gap.

- CWS-NS will acquire some information differently. CWS-NS will have access to information to which it has not previously had access. Users will need to learn how to effectively use the new sources of information.
- End users will have a decreased reliance on the existing manual processes by providing client data via an automated system.
- Organizational Change Management (OCM) will be planned, communicated and implemented prior to deployment to ensure the maximum staff acceptance of program/stakeholder accepted business practice process adaptations and changes.

5.1.15 Impact on Existing System

The existing system will need to be supported during the design, development and implementation of the proposed system. After a period of time the existing system will be terminated. There are no plans to utilize any hardware or software from the existing system. Existing system data will be converted and integrated to the proposed system during DD&I - Phase 1.

The project schedule provides an estimated cost of approximately \$1.4 million and 11,600 hours for the SI to complete the conversion of the CWS/CMS Data and the External Systems Data.

This is detailed in the "SI Contract Services / Core Services / Design & Configuration / Team 2" subsection of the project schedule (lines 39 & 40).

Additional data conversion activities (plan of approximately \$31 m) to be complete at the county level (analysis, data cleanup, data preparation) are provided in the Other Costs line item of the EAW's.

5.1.16 Consistency With Overall Strategies

The proposed system is consistent with California's 2011 IT Strategic Plan and California Health and Human Services' (CHHS) Information Management Strategy as well as federal SACWIS requirements. The most significant areas of improved alignment are in State Data Center utilization (see Section 5.1.19 Impact on Data Centers and Section 5.1.20 State Data Center Consolidation).

5.1.17 Impact on Current Infrastructure

The proposed system will not require any changes to the agency's existing IT infrastructure but will require various technical changes to the counties access to the State Data Center's as well as the California Government Enterprise Network (CGen). Since the proposed system will be the first county-administered, statewide automated system utilizing web based technology it is best positioned to provide State Chief Information Officer's CGen migration and maintain compliance the CTA directive. During the planning phase of the proposed system an analysis must be conducted to determine the counties web- based technical stability. That analysis will establish whether counties leverage local IT hardware systems and/or software services or be dependent on the state to provide continued support.

5.1.18 Impact on Data Center(s)

The proposed system would be vendor managed and not require additional State Data Center support capabilities beyond current levels required for other state customers in the TMS-P. The State Data Center's infrastructure would not need to be augmented; however, there is potential for the addition of state services available in the service catalog based on the proposed system's SOA model.

While there is no impact on the State Data Center based on this system, Help Desk services will continue as in the current system based on the existing service level agreement..

5.1.19 System Hosting/Data Center Consolidation

The checked box describes the entity planned to host the system.

☐ OTech Managed Services ☒ OTech Federated Data Center ☐ Agency/Dept
☐ Outsourced/Other _____

The proposed system is consistent with California's State Data Center consolidation requirements.

5.1.20 Backup and Operational Recovery

Business requirements dictate 24 hours a day, 7 days a week, 365 days a year access to data in the system of record. To comply with this requirement and keep with federal mandates the following backup and recovery areas would be implemented in the proposed system:

Fail over site: A warm fail-over site has been included in the cost of this FSR. However, the location of the site and whether it will be state or vendor managed is unknown at this point.

We recommend the following fail-over environment equipment:

- A fail-over database server with at least eight 2.13 GHz, quad-core (4 Core) processors with 8 GB of memory and 4 TB of disk space utilizing SAN technology.
- A fail-over backup database server with at least eight 2.13 GHz, quad-core (4 Core) processors with 8 GB of memory and 4 TB of disk space of SAN storage.
- Five fail-over application servers with at least sixteen 2.13 GHz, quad-core (4 Core) processors with 16 GB of memory and 1TB of disk space.
- Two fail-over web servers with at least eight 2.13 GHz, quad-core (4 Core) processors with 16 GB of memory and 500 GB of disk space.

In the proposed solution, the State Data Center will work with the contracted vendor, county and state to determine the best fail over service offerings at the point when the solution is implemented.

Offsite Data Storage: The vendor will provide off-site storage of the vital electronic data processing files away from the State Data Center. In the event of a disaster that affects the primary business location, customers will be able to restore vital electronic records and recover processing capabilities while restoring normal business functions.

Data Archiving Requirements: The proposed solution will include processes for archiving and purging its data. The solution will support a range of system functions which includes the ability to archive data for recall purposes and to purge it where appropriate. This functionality will enhance storage capability, efficiency in relevant and expeditious searching of data, and the ability to economically retain historical information.

Data Migration: The vendor will provide data migration plan that utilizes industry standards and best practices which most closely aligns with the proposed solution. The plan will include design, migration, and data validation. In the event of data loss the vendor will provide a data rollback strategy to restore critical records and recover lost data.

Rollback Strategy: The rollback strategy will define the vendor plans to use backup and recovery procedures to return the production environment to the state it was in before changes were made. Rollback strategies will be problem specific approaches for different types of issues; for example, backing out an entire system change or a specific component if the issue is isolated. The strategy will define how data or systems are recovered in each of the rollback plans.

Network Connectivity: Network recovery/Point of Presence (POP) will be included in the proposed system by the State Data Center to provide for recovery of communication circuits disabled by a disaster in which a POP site has been destroyed.

5.1.21 Public Access

Public access to the proposed system would allow SSL access to the various types of users of the system including Indian tribes, family and juvenile courts and court officers, foster youth, foster parents, biological parents, guardians, adoptive parents,

Independent Living Program service providers, mental health and other therapeutic service providers, law enforcement agencies, and community based service organizations. Users with secure access will enter and retrieve information on the system and the case worker can retrieve it to add to their court report or use as part of their family assessment.

The CWS-NS must operate with secure connections at all times. To ensure this, the CWS-NS envisions the following will be implemented:

- SSL – with a minimum of 256-bit encryption or higher if available.
- Secure channels will be used.
- There will be a configuration facility to allow the configuring of all security levels, controls, settings, environments, etc.
- Communications from the Web servers in the DMZ to the internal application servers will use WS-Security and Kerberos tokens.
- All data will be encrypted whether at rest or in motion.
- CAPTCHAs (Completely Automated Public Turing test to tell Computers and Humans Apart) will be used as part of the authentication process where ever registration is being done, where any sort of attack may occur or where bots will not be allowed.
- Secure standards will be implemented for all VPN activity within the CWS-NS.

5.1.22 Costs and Benefits

Total Project Costs

The Buy/Build proposed solution's Total Project Costs include One-Time IT Costs and Continuing IT Costs.

5.1.22.1 One-Time IT Costs

One-time cost estimates were calculated over a period of 51 months: a 24-month period for the planning and procurement phase and a 27-month period for the Development and Implementation phase. The proposed solution total one-time costs average \$82.6 million annually. With approved FFP of 50 percent, the approximate annual SGF cost will be \$41.3 million (based on 51 months of One-Time IT Costs). The table following depicts the SFY one-time cost breakdown by category of expense.

Figure 12 - Estimated One-Time CWS-NS Costs

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs														
Staff (Salaries & Benefits)	31.0	3,289,316	33.0	3,502,642	42.0	4,469,978	52.5	5,641,459	14.0	1,507,988	0.0	0	172.5	18,411,385
Hardware Purchase		0		0		1,209,000		744,000		186,000		0		2,139,000
Software Purchase/License		0		0		37,854,340		8,116,175		2,029,044		0		47,999,559
Telecommunications		0		0		0		0		0		0		0
Contract Services														
Software Customization		0		0		10,051,096		11,244,846		2,929,962		0		24,225,904
Project Management		0		0		0		0		0		0		0
Project Oversight		127,842		127,842		127,842		127,842		31,961		0		543,330
IV&V Services		317,520		425,376		788,256		788,256		52,416		0		2,371,824
Other Contract Services		4,260,996		5,569,504		10,305,929		14,710,731		7,563,165		0		42,410,325
TOTAL Contract Services		4,706,358		6,122,722		21,273,124		26,871,676		10,577,503		0		69,551,382
Data Center Services		247,955		247,955		734,360		734,360		183,590		0		2,148,220
Agency Facilities		392,000		1,171,930		348,140		343,140		85,785		0		2,340,995
Other		1,666,417		22,604,154		62,665,150		79,482,339		42,083,130		0		208,501,190
Total One-time IT Costs	31.0	10,302,046	33.0	33,649,404	42.0	128,554,092	52.5	121,933,149	14.0	56,653,040	0.0	0	172.5	351,091,731

The estimated one-time project costs associated with the proposed solution consist of Staffing, Hardware and Software Purchase, Contract Services, Data Center Services, Agency Facilities, and Other. The cost estimates for these line items consist of the following assumptions:

5.1.22.1.1 Staffing

Personnel Year (PY) costs are developed based on a combination of classification pay scales and benefits (retirement, medical, dental, etc.). In building the PY costs, the benefit factor is applied to each classification individually. Therefore, the individual PY cost estimates will vary by classification.

Refer to section 5.1.10.1 for details of the staffing methodology and approach.

5.1.22.1.2 Hardware/Software Purchase and License

Hardware

One-time project costs for hardware for the CWS-NS Project are \$2,949,000 and include the following hardware which will be purchased during DD&I – Phase 1.

Hardware Description	Quantity	Unit Cost	Total
Servers	22	\$15,000	\$330,000
Firewalls	4	\$6,750	\$27,000
Storage Area Network	1	\$1,647,000	\$1,647,000
Disaster Recovery	24,000	\$33.75	\$810,000
Fail Over Hardware:			
Production Database Server	1	\$15,000	\$15,000
Backup Production Database Server	1	\$15,000	\$15,000
Production Application Servers	5	\$15,000	\$75,000
Web Servers	2	\$15,000	\$30,000

Software

One-time project costs for software for the CWS-NS Project are \$47,999,559 and include the following software:

Software Description	Quantity	Unit Cost	Total
Application Software License	17,000	\$2,720	\$46,240,000
Enterprise Service Bus	480	\$862	\$413,640
Enterprise Data Warehouse	1	\$82,900	\$83,788*
Enterprise Database	6	\$28,688	\$172,125
Reporting Software	2	\$149,625	\$299,250
Service Desk Software	335	\$2,178	\$729,600
Virtualization Software	8	\$3,637	\$29,094*
Virtualization Server Software	1	\$1,250	\$6,563*
Fail Over Software:			
Production Database Server Software	1	\$12,750	\$12,750
Backup Production Database Server Software	1	\$12,750	\$12,750

*some totals include annual licensing fees

The COTS solution software (Application Software License) assumes an annual unit cost of \$2,720 per user for 17,000 total licenses. An annual software maintenance fee is estimated to be 20 percent of the base cost amount.

5.1.22.1.3 Contract Services

Contract services costs are comprised of the SI vendor services, Independent Project Oversight, and IV&V services.

SI Vendor Contract

SI vendor costs are a compilation of costs, as follows:

- System integrator services - SI services begin in FY 2015/16 and continue on through M&O.
- System integrator contract – System changes are estimated at ten percent of the contract.
- Training for the new system solution - Training for the new system solution will occur in DD&I – Phase 1 and DD&I – Phase 2, and is estimated to be a total cost of \$5,450,000.
- Software license purchases (enterprise service BUS, application databases, desktop/server and support, customer service and management, application platforms, including fail-over software) - Software licenses purchases for One-time project costs are estimated at \$47,999,559.
- Hardware for system solution including fail-over hardware - Hardware purchases consist of servers, firewalls and SAN in FY 15/16. The servers are on a five-year refresh cycle.
- Facilities (furniture, building leases, facility modifications, moving costs, voice and data modifications, conference room rentals and CDSS facility costs) - At the initiation of the Planning and Procurement Phase, the CWS-NS Project will move to the former location of the CWS Web Project and will stay in that facility through the Planning and Procurement Phase. Total One-Time Costs for Agency Facilities are estimated to be \$777,065 and are comprised of one-time furniture purchases, lease costs, facility modifications, moving costs, conference room rental, voice and data modifications and CDSS facility costs. In July 2015, the CWS-NS Project is moving to new facilities due to the increase in the number of staff.

Independent Project Oversight Contract

The Independent Project Oversight contract totals \$543,330. This contract will be an interagency agreement between OSI and CTA to bring on a limited term Data Processing Manager III from July 2013 through DD&I (September 2017).

Independent Validation and Verification Contract

The Independent Validation and Verification (IV&V) services contract totals \$2,371,824. This contract will provide a total of four consultants during the planning, procurement and DD&I phases. One consultant will initiate project support in July 2013; a second consultant will be added in January 2014. Two additional

consultants will be added in July 2017 (DD&I - Phase I). These four consultants will support the project through June 2017, then one consultant will remain until the project closure activities are completed in Aug 2017.

5.1.22.1.4 Other Contract Services

Other Contract Services costs total \$42,410,325.

Technical Support Services Contract

This cost includes a technical service contract to provide technical subject matter expertise (SME) at a cost of \$3,041,280. This technical SME will provide support for definition and delivery of the Information Exchange Interfaces between July 2013 and June 2016.

County Consultant Contracts

Also included in this category are several county consultant contracts to ensure business and program needs are met. These 11 county consultants' contracts total \$6,006,000 and cover the period from project initiation through M&O. Six county consultants will join the project at the initiation of Planning and Procurement. Six additional county consultants will join the project at the beginning of DD&I - Phase I. The one county consultant providing APD support (including coordinating and preparing the PAPDU's, IAPD, IAPDUs, and As Needed documents) through Planning/Procurement and DD&I - Phase 1 will be replaced by a re-directed CWS/CMS staff member at the beginning of DD&I-Phase 2. At the beginning of M&O, the county consultant participation will be reduced from a total of ten to just two. During M&O ongoing federal and state mandates along with implementation of best practices for business practices requires ongoing consultation with county consultants to represent county business practices (both child welfare and probation) for statewide initiatives.

County Welfare Directors Association Contract

Other Contract Services include a County Welfare Directors Association contract at a total cost of \$428,606.

Intellectual Property Legal Services Contract

An intellectual property legal subject matter expert at a cost of \$250,000.

Organizational Change Management Contract

Organizational Change Management (OCM) support at a cost of \$3,432,000. The OCM contract will initiate with one consultant in July 2013 and will include a second consultant in July 2015. These two consultants remain through September 2017.

Regional Training Academy (RTA) Contract: The RTA contract cost \$28,355,999 includes contract augmentation for Regional Training Academies. Half of this cost is for OCM training and the other half is for new system training.

Prosci Site Licenses

Also included in the Other Contracts costs of \$664,650 are Prosci site licenses

(toolkit, materials and licenses) and ADKAR costs (certifications, train the trainer and certification programs).

DGS Fees

DGS fees total \$231,790 and were calculated per the DGS' 2011-12 Price Book at 1.40 percent of the value of the order or a maximum of \$35,000

5.1.22.1.5 Data Center Services - (Tenant Managed Services Premium)

Total One-Time Project Costs for Data Center Services are estimated to be \$2,148,220. The cost estimates are based on anticipated services and the OTech pricing schedule. The Data Center Services costs are comprised of (the cost shown is the total One-Time Project Cost for that item): Pricing based on current CWS/CMS billing from OTech service catalog listings:

- E-mail services and storage costs of \$906,780: assumes a recurring monthly cost for e-mail accounts and e-mail storage. The monthly charge of \$11,480 is for e-mail account services and \$6,300 for e-mail storage.
- Core networking services (OPT-E-MAN) of \$945,000: assumes a recurring monthly cost of \$3,500 per unit for ten units.
- OTech service request charges of \$47,190: assumes 363 hours at \$130.00 per hour at a G300 Level 2 Consultant rate.
- TMS-P racking services (standard cabinets) of \$202,500: assumes a recurring monthly cost of \$7,500 per unit for three units.
- CDSS Data Center costs for various services at a cost of \$46,750.

5.1.22.1.6 Other

The One-Time Project Other Costs are comprised of all other expenses directly attributable to the project and total \$208,501,190.

- **Operating Equipment & Expenses (OE&E):** assumes a recurring annual cost of \$10,914/PY for all OSI staff, recurring annual cost of \$8,265/PY for all OSI consultants, and a recurring annual cost of \$2,470/PY for all CDSS staff and contractors.
- **Travel:** assumes additional travel costs in excess of travel budgeted in OE&E. Travel was estimated at a rate of \$200/month per OSI staff (18 OSI staff), \$150/month per CDSS staff (13 CDSS staff), and \$2,200/month per county consultant (six county consultants). Short term travel was estimated at a rate of \$1,600/month for six county consultant staff. Long term travel was estimated at a rate of \$2,200/month for six county consultant staff. Other travel estimates were calculated based on the need to travel for OCM, Project communications, users and data.
- **Hardware:** assumes a hardware total cost of \$144,248. This includes one server with a four-year refresh rate at a cost of \$7,954. Also included are laptops for project staff use at a cost of \$930/laptop with a four-year refresh rate for a total of

\$130,200. Thus, the total for Hardware cost as a One-Time Project cost is \$146,108.

- **Software:** assumes a Server Operating System for \$2,640; laptop supporting software for all project staff at an annual rate of \$2,800/software; and other project software tools for a sum total of \$1,128,119 for One-Time Project Software costs.
- **Information Technology Costs** of \$38,250.
- **Administrative Overhead:** assumes a total one-time project administrative overhead cost of \$3,091,397. Overhead is an OSI charge for centralized administrative services such as fiscal, business services, procurement, human resources, executive staff services, and for associated operating expenses and equipment. Overhead is budgeted on a per capita basis associated with OSI project staff for projects costs which the OSI has pending authority appropriation.
- **Pro Rata:** assumes a total one-time project pro rata cost of \$837,995. This cost is also based on the number of OSI staff on the project and an annual rate of \$7,286.91 per PY.
- **Other County Costs** of \$197,957,546. This cost is comprised of the FTE cost for county trainers to provide application and OCM training; project management, help desk, IT support and system administrator training FTE costs; data conversion; change management (OCM/Policy); and application and OCM training FTE time allocation costs.

5.1.22.2 Continuing IT Project Costs

Continuing IT Project Costs average \$23.9 million annually. With approved FFP of 50 percent, the approximate annual SGF cost will be \$12 million (based on five years of Continuing IT Project Costs). The table below depicts the SFY Continuing IT Project Costs breakdown by category of expense.

Figure 13 - Continuing IT Project Costs

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Continuing IT Project Costs														
Staff (Salaries & Benefits)	0.0	0	0.0	0	0.0	0	0.0	0	30.0	3,388,470	40.0	4,517,960	70.0	7,906,431
Hardware Lease/Maintenance		0		0		0		0		558,000		744,000		1,302,000
Software Maintenance/Licenses		0		0		0		0		6,087,131		8,116,175		14,203,306
Telecommunications		0		0		0		0		0		0		0
Contract Services		0		0		0		0		5,248,658		6,951,544		12,200,201
Data Center Services		0		0		0		0		559,770		746,360		1,306,130
Agency Facilities		0		0		0		0		257,355		343,140		600,495
Other		0		0		0		0		1,679,475		2,450,255		4,129,730
Total Continuing IT Costs	0.0	0	0.0	0	0.0	0	0.0	0	30.0	17,778,859	40.0	23,869,434	70.0	41,648,293

Costing methodology for the Continuing IT Project Costs is identical to the methodology used for One-Time IT Project Costs. Varying factors are the number of staff which fluctuates during the project lifecycle. Refer to the Project Staffing Levels table above.

Continuing IT Project costs is \$41,648,293 through 2018/19. This includes the SI vendor contract at \$10,255,000(\$8,750,000 for service and support, \$875,000 for system changes and \$630,000 for disaster recovery services). The CWDA contract stays on through 2018/19 at a cost of \$413,828. County consultant contracts also continue through 2018/19 for a total of \$1,470,000. DGS' fees amount to \$61,374

5.1.22.3 Continuing Existing Costs

Total Continuing Existing costs will average \$142.4 million per year through FY 18/19. These costs are associated with M&O activities associated with the existing CWS/CMS, annual system updates and patches, county support, other system upgrades and refreshes as applicable under the existing M&O contract, program staff and other program costs. Annually, \$7 million is allocated for system changes plus 6,000 hours of consulting services. With approved FFP of 50 percent, the approximate annual SGF cost will be \$71.2 million. The costs are based on the current CWS/CMS baseline budget and estimated annual M&O contract increases:

Figure 14 –Continuing Existing Costs

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Continuing Existing Costs														
Information Technology Staff	49.5	4,665,953	47.5	4,423,339	38.5	3,324,207	26.5	1,811,219	5.6	452,805	0.0	0	167.6	14,677,523
Other IT Costs		75,182,501		75,986,917		76,819,750		77,682,251		19,643,219		0		325,314,638
Total Continuing Existing IT Costs	49.5	79,848,454	47.5	80,410,256	38.5	80,143,957	26.5	79,493,470	5.6	20,096,024	0.0	0	167.6	339,992,161
Program Staff	13.0	1,162,650	13.0	1,162,650	13.0	1,162,650	13.0	1,162,650	15.3	1,416,593	16.0	1,501,241	83.3	7,568,432
Other Program Costs		84,446,069		84,446,069		84,446,069		84,446,069		84,446,069		84,446,069		506,676,414
Total Continuing Existing Program Cost	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	15.3	85,862,662	16.0	85,947,310	83.3	514,244,846
Total Continuing Existing Costs	62.5	165,457,173	60.5	166,018,975	51.5	165,752,676	39.5	165,102,189	20.9	105,958,686	16.0	85,947,310	250.9	854,237,006

Information Technology Staff Costs

The proposed solution continuing staff costs are as follows: Existing system support PYs and funding will be required to perform current system M&O activities, concurrently with the one-time project costs through DD&I. Existing PYs and funding are anticipated to be redirected during 2017/18 to fund the one-time and continuing IT project costs.

Other IT Costs

Other IT Costs total \$325,314,638 and reflect the baseline budget amounts for the existing OE&E, System Hardware, Software, Technical Support, Pro Rata, Overhead, and all contracts under CWS/CMS. The continuing hardware and software costs are based on the annual needs to support state and vendor staff to conduct the required M&O activities.

Please refer to Section 8 – Economic Analysis Worksheets for the fiscal year and line item cost details of the Proposed Alternative New System Buy/Build Approach.

Program Staff Costs

Existing program staff of 13.0 PYs continues through DD&I. Additional staff are added at the beginning of M&O to total 16.0 PYs. Total Existing Program Staff Costs equal \$7,568,432.

Other Program Costs

Other Program Costs total \$506,676,414 and include County Goods and Services which is comprised of county EDP costs at \$397,647,438; System Support Staff for county IT Help Desk Costs at \$108,654,000, depreciation on county equipment at \$374,976 and data clean up at \$13,166,667.

5.2 Rationale for Selection

The CAST developed a formal evaluation framework to assist with scoring and ranking the alternatives. The criteria that formed this framework were based on business drivers that were agreed upon by the CWS/CMS Program Impact Advisory Committee (PIAC), CWS/CMS Technical Advisory Committee (TAC), CWS/CMS Oversight Committee (OSC), an Executive Study Control Board and the CDSS Director. Employing the evaluation framework, the team analyzed, ranked, and scored each alternative (detailed in Section 5.3 – Other Alternatives Considered) based on six evaluation factors:

- CWS business needs
- Technical viability
- SACWIS
- Time
- Risk
- Cost

Scorecard	
Business	●
Technical	●
SACWIS	●
Time	●
Cost	●
Risk	●
90 percent overall score	

Table 5-12 – New System – Buy/Build Approach – Scorecard

This evaluation framework and process emphasized the degree in which each alternative measured against the six evaluation factors and their associated criteria. The approach provided greater sensitivity to how well or how poorly each alternative compared to each criterion. The evaluation was based on independent judgment, the team’s understanding of CWS’ critical needs and priorities, and expert opinion. The rating selected for each criterion within the six evaluation factors was based on team consensus. Resulting scores were calculated by multiplying the weight of the selected rating and the available points for each criterion. See Appendix I, Evaluation Framework, for additional details and the actual scores of the four alternatives under examination.

Based on final scores derived from the evaluation framework, the recommended solution, New System Buy/Build, provided the best overall mix of service delivery and cost management. Its “out-of-the-box” approach for initial implementation, combined with the incorporation of small custom service components will result in the shortest duration to full-benefit realization, the lowest system delivery cost and the lowest ten-year total cost of ownership.

The rationale for the proposed technical solution, a New System Buy/Build approach will deliver all the needed critical functionality in two releases.

- The first release will provide core system capabilities that provide at-a-minimum what is available in the current system. Delivery of these replacement core capabilities will allow decommissioning of the existing CWS/CMS system and over 100 external systems throughout the State.

- The second release will provide practice enhancements that were not implemented in the current CWS/CMS, as well as required capabilities that result from changes in law, policy and practice between initiation of the system development and initiation of the second release.

The following table identifies how the proposed selection will meet each of the problem/objective elements identified in Section 3.2.2 – Problem/Opportunity Assessment. This table identifies how each of the identified Problem/Opportunity elements will be satisfied by the Buy/Build technical solution.

Table 5-13 - Technical Solution to Identify Problem/Opportunity Elements

Problem	Opportunity	Technical Solution
Resource Utilization	Enhance Data Entry Through Improved Navigation Design	The navigation design issue with the current system will be addressed in the new system through a combination of the delivered (possibly configurable) user interface in the purchased product, in concert with the orchestration and workflow capabilities of the SOA environment.
	Enhance Interactions/Information Exchanges Through Automated Workflow Management	Automated workflow will be delivered through the workflow capabilities of the SOA environment.
System Access	Enhance CWS worker System Access Through Provision of Mobile Capabilities	The new system will be web-based and hosted through a centralized computing environment. In its simplest form, system access will be possible from any computing device that has both a web-browser and an internet connection. Some policy restrictions may exist for some users that will require access through a county POP.
	Enhance Service Organization and Service Provider Access to System Information	The new system will be web-based and hosted through a centralized computing environment. In its simplest form, system access will be possible from any computing device that has both a web-browser and an internet connection. These users will

Problem	Opportunity	Technical Solution
		be considered to be “external” users and will most likely be restricted to access through a portal.
Information Exchange Interfaces	Enhance Collaborative, Bi-Directional Information Exchange Capabilities	Bi-directional information exchange interfaces are expected to be provided through the use SOA “adapters” (which will require MOAs and external system access rights to the source system).
Business Collaboration	Enhance Support Service Collaboration Capabilities	In addition to the information exchange interfaces described above, automation services such as email-based calendaring and virtual meetings (i.e., Adobe Connect) will be provided with the new system to these external users.
Outcome-Driven Planning, Management and Assessment	Enhance Safety and Risk Assessment Capabilities	A single, integrated safety and risk assessment service will be delivered in the purchased product or will be provided through a custom service.
	Enhance Tracking and Communication with the family and juvenile courts	This will be accomplished through an information exchange interface and with the business collaboration capabilities.
SACWIS Compliance	Provide Adoptions Case Management Capabilities	This will be provided through one or more custom services.
	Enhance Eligibility Determination	This will be provided through one or more custom services.
	Provide Missing Required Information Exchange Interfaces	Refer to the Information Exchange Interfaces definition above.
	Provide Missing Financial Management Capabilities	Provide Missing Financial Management Capabilities

The CAST also conducted two RFIs to validate the feasibility of the Buy/Build approach. Vendor responses from the second RFI substantiated viable solutions in the

marketplace that can support this approach. Of the 1,120 total capabilities required for the CWS-NS, vendors stated that their solution could provide 70 to 84 percent of the capabilities straight out-of-the-box. The missing capabilities or gaps that require the development of custom services ranged from 13 to 30 percent. Except for one vendor, the no responses were very low, essentially ranging from one to two percent. For further details, refer to Appendix K, Validation of the Buy/Build Feasibility.

The following are the benefits and challenges that may impact the selection of the proposed solution:

Benefits

- The proposed solution is best when a majority of business needs can be delivered with a fully-developed existing product, greatly shortening delivery of needed business value.
- The use of the buy/build approach provides maximum flexibility.
- Delivery of a service(s) can be prioritized and sequenced to best align with business goals, needs and objectives.
- Because the functionality of the pre-existing product will not contain any customization, vendor-initiated upgrades to provide new functionality and/or address defect correction can be implemented with minimal impact to the system operations.

Challenges

- A very high number of requests for the development of custom services can result in excessive delays in delivery of this alternative.

5.3 Other Alternatives Considered

The proposed Buy/Build alternative was compared against three other alternatives: 1) CWS/CMS Upgrade, 2) Re-start the CWS/Web, and 3) build a new system using a custom approach. All four alternatives have varying project lifecycles and costs for all alternatives were extended through one full year following full implementation. Please refer to Exhibit M – Ten Year EAWs for cost figures provided in this section.

In the table below, project one-time costs are shown for all four alternatives. As indicated below, the proposed solution Buy/Build has the lowest ten-year total project one-time costs.

Table 5-14 - Comparison of One-Time Project Costs

Alt P	Alt 1	Alt 2	Alt 3
Buy/Build	CWS/CMS Upgrade	Re-start CWS/Web	New System Custom
\$352,016,727	\$474,197,418	\$584,352,784	\$460,340,097

The Buy/Build alternative also begins payback of \$60.0 million a year in 2018-19 as compared to the New System Custom of \$35.0 million in 2018-19; CWS/CMS Upgrade of \$12.6 million in 2020-21; and the Re-start CWS/Web of \$18.7 million also in 2020/21. Please refer to Section 8 – Economic Analysis Worksheets under the SUM tabs.

5.3.1 Upgrade the Existing CWS/CMS

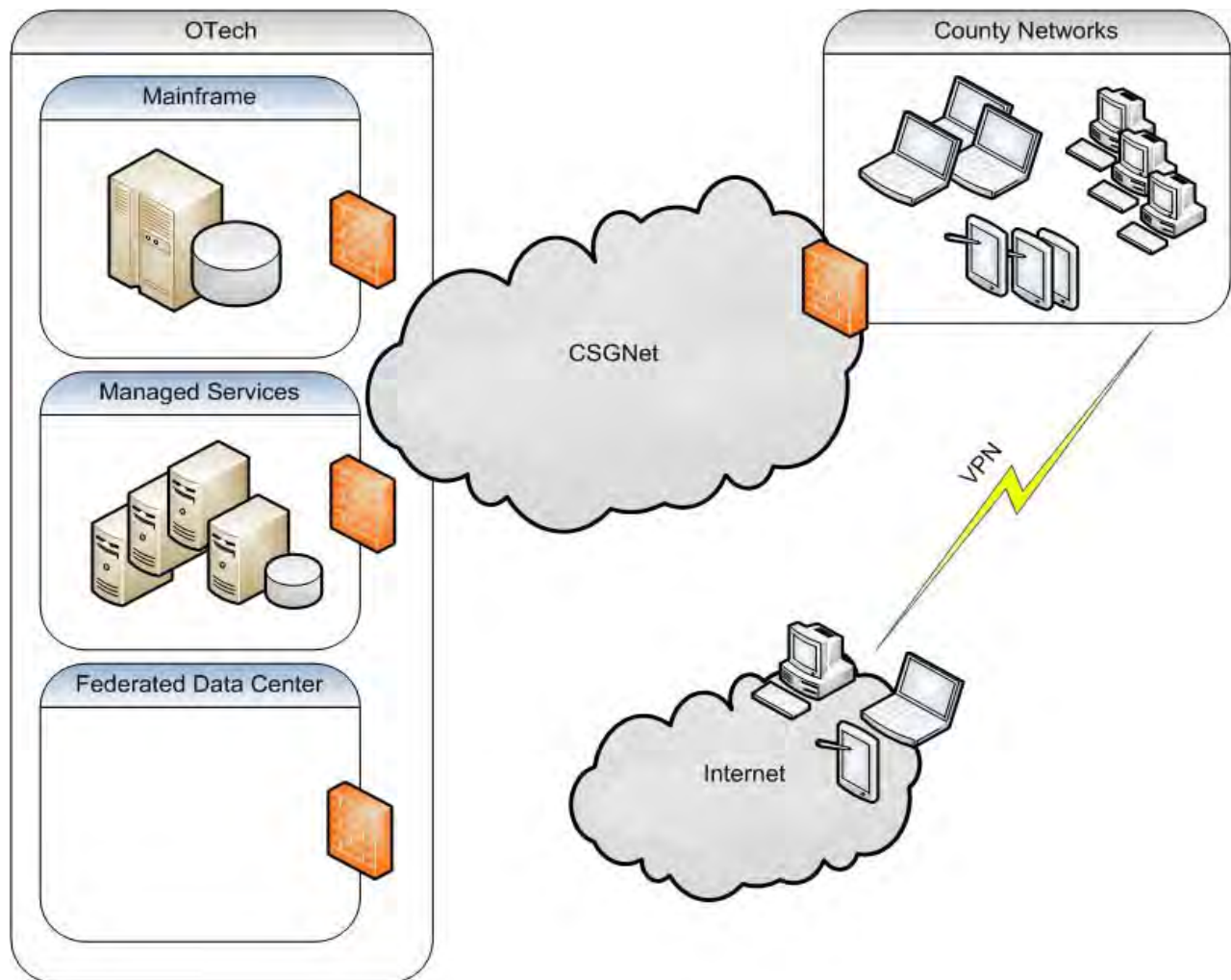
This alternative is focused on upgrading the current CWS/CMS to Web-based technologies. The existing thick client will be upgraded to a browser-based thin client and converted to n-tiered architecture. Enhancements and updates will have to be planned and delivered after the upgrade is completed and stabilized. The distributed application servers will be centralized to a Web-based application server(s) co-located with the IBM mainframes supporting the DB2 database.

This alternative will:

- Upgrade CWS/CMS client code to Web-based technologies.
- Migrate from 200+ application servers to a central Web-based application server hardware/software environment at the State Data Center.
- Utilize the existing CICS/COBOL/DB2 code base.
- Add and enhance critical functionality after the initial upgrade is completed and the application is stabilized.

Figure 16 – CWS/CMS Upgrade – Technical Environment, illustrates the architecture of this alternative, showing that the thick client has been replaced with a Web browser. The distributed application servers have been removed from the counties, and the IBM mainframe and DB2 database have been retained, but only to support the database. Access to the Web-based application server(s), IBM mainframe, and DB2 database are only supported across CGen and county WANs.

Figure 15 – CWS/CMS Upgrade – Technical Environment



5.3.1.1 Technical Description

The scorecard shown above depicts how well this alternative scored for each evaluation factor and its overall score as a percentage. The icon shows the percent to which the alternative met the needs of the evaluation category (zero, quarter-, half-, three quarters- or fully-met).

Using this alternative, the process of upgrading the CWS/CMS technical infrastructure will evolve over time. Changes to the existing application and systems architecture will only be made to meet critical operational requirements, such as changing the security model to accommodate new user types or modifying an existing interface. The reporting architecture will leverage the existing data reporting capability. All counties with adequate technical infrastructure and support resources (typically coexistent counties) can deploy a data mart fed by the data warehouse. Counties without adequate technical infrastructure and support resources will access the data warehouse directly for their day-to-day operational reporting needs. The enhanced data warehouse will serve all county and state users for analytical reporting, data mining, and/or ad-hoc reporting. The potential retention of the CWS/CMS application architecture, IBM mainframe, and DB2 database as back-office infrastructure introduces a risk that users will be impacted by upgrades occurring in a production environment

Scorecard	
Business	●
Technical	●
SACWIS	●
Time	●
Cost	●
Risk	●
50 percent overall score	

Table 5-15 – CWS/CMS Upgrade – Scorecard

To re-host and upgrade the existing client-based user interface, business logic, and database interface will require extensive requirements specification/validation, analysis, and design prior to initiation of the build phase of the lifecycle.

The upgrade of CWS/CMS will result in:

- Replacement of the existing client with a Web browser.
- Re-host of the existing client-based user interface, business logic and database interface into n-tiered architecture.
- Development and delivery of critical functionality.
- Consolidation of the distributed application server architecture.
- Retention of the IBM mainframe.
- Retention of the existing CICS/COBOL/DB2 code base.
- Retention of application access through:
 - CGen (via VPN).

- County LAN and the CGen.
- Direct connection to the CGen.
- Wireless connection to a county LAN and/or the CGen.

Critical functionality that must be available for DD&I - Phase 1 can be developed separately from the major re-host effort (therefore not impacting its schedule) and deployed at the same time. Less-critical functionality will be prioritized, sequenced, and scheduled for inclusion in post-deployment enhancement releases.

5.3.1.2 Costs

The total project costs for the CWS/CMS Upgrade alternative are estimated to be \$828,603,307 and consist of One-Time IT Project costs and Continuing IT Project costs from SFY 2013-14 through SFY 2022-23.

The estimated One-Time IT Project costs of \$458,321,418 consist of project staffing (including OE&E), solution hardware and software, all vendor and county contracts including the SI, OCM services, data center services, and agency facilities. With approved FFP of 50 percent, the total One-Time IT Project costs to the SGF are estimated to be approximately \$229,160,709, incurred between SFY 2013-14 and through the second quarter of 2019-20.

Total Continuing IT Project costs are estimated at \$195,164,935 after full implementation. With approved FFP of 50 percent, the Continuing IT Project costs are estimated to be approximately \$65.0 million annually. This equates to a savings of roughly \$17.0 million per year compared to maintaining the existing system.

Please refer to Section 8 – Economic Analysis Worksheets for the fiscal year and line item cost details of the Alternative #1 CWS/CMS Upgrade.

5.3.1.3 Benefits

- Offers minimal impact to end users.
- Requires no data conversion.
- Replaces the thick client with a Web-browser-based thin client, allowing for access anywhere, anytime.
- Allows incremental functionality enhancements (based on budget and priorities) after DD&I Phase 1.
- Removes the operational cost of periodic refreshes of 200+ distributed application servers.
- Removes the operational cost of special workstation images to run the client software.
- Centralized application server(s) can be managed at the State Data Center.

- Results in an improved maintenance lifecycle due to single-point enhancement/upgrade deployment on the centralized application server(s).

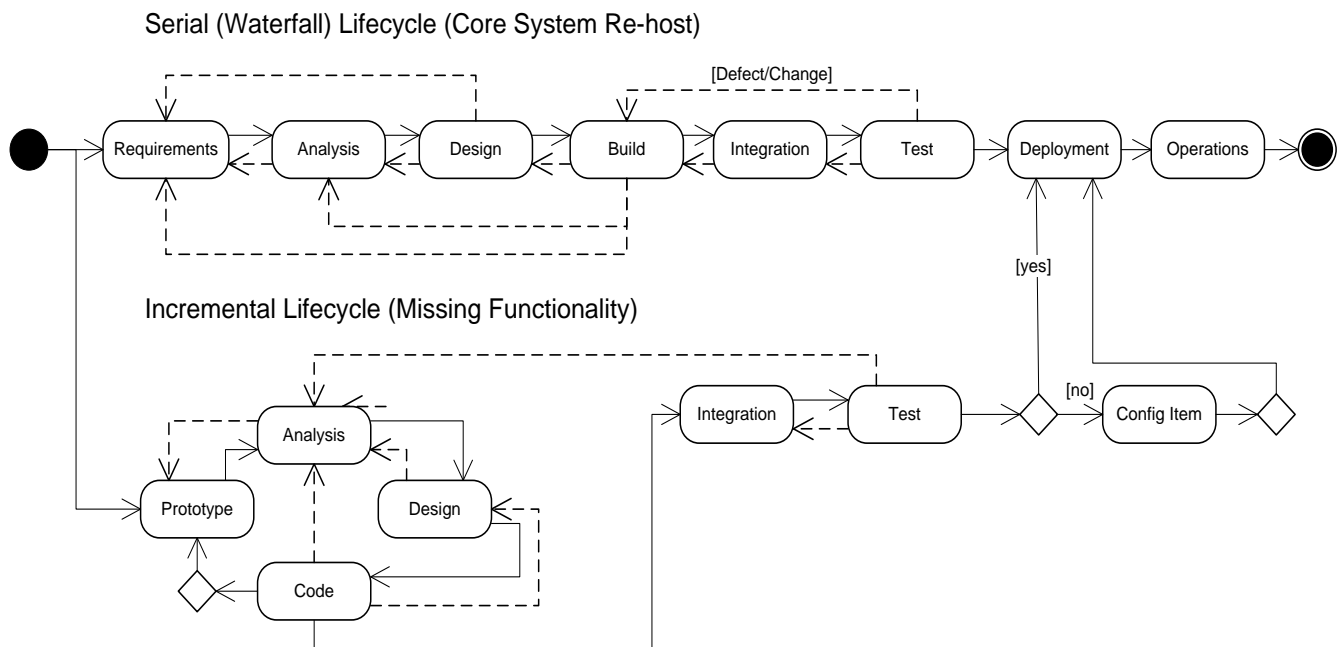
5.3.1.4 Challenges

- Offers only restricted use of the Web browser, as a thin client, to the State's intranet. (This does not provide internet capabilities.)
- Retains the operation and maintenance costs associated with the IBM mainframe and DB2 database.
- May require greater day-to-day performance management because of increased infrastructure complexity.
- Interface to partner systems is batch, which does not provide real-time information.

- **Methodology**

The CWS/CMS Upgrade alternative will require two separate development lifecycles. Because of the complexity (which includes a new architecture) and the number of partner dependencies associated with the initial upgrade of the CWS/CMS client to Web technologies, this release will be executed using a separate serial-development lifecycle. Once DD&I - Phase 1 has been completed, a new incremental-development lifecycle approach will apply to developing the new and enhanced functionality that was not present in CWS/CMS.

Figure 16 – CWS/CMS Upgrade – Lifecycle Methodology



A detailed discussion on the approach to be taken for the CWS/CMS Upgrade can be found in Appendix B – Project Management Plan.

- **Business assessment**

This alternative is focused on upgrading the existing CWS/CMS to web-based technologies. Users will be provided access to the existing CWS/CMS via the county intranet. Remote access will continue to require the use of tokens and virtual private networks to access the county intranet to log on. Identified critical functionality and modifications to existing functionality will be prioritized, sequenced, and scheduled for inclusion in future enhancement releases after the upgrade is completed and stabilized.

This alternative leverages existing business infrastructure with the least disruption to business operations. As it involves minimal changes to the appearance and navigation of the application, users will require minimal training regarding changes. New functionality will require user training as it is implemented. The existing training infrastructure will be used for statewide training.

The stakeholder community identified that the functionality needed to support critical CWS operations and the length of time to delivery are their highest priorities when considering technical alternatives. This alternative is one of the slower to deliver benefits. This alternative also retains a number of existing constraints that will continue to impede usability and effective case management practice, such as the ease-of-use problems with navigation, the multiple inefficient reporting solutions, the limited mobile access, and the lack of role-based access. These constraints limit the ability to implement the self-service functionality as envisioned to allow CWS community partners to view and enter data.

Although the intent is to implement critical functionality and to modify existing problem functionality, it will be difficult to implement some of the functionality as preferred or optimal to support CWS practice.

This alternative does not have the ability to support real-time interfaces with other systems. It may also be difficult, due to the continuation of the existing environment and its limitations, to support all the identified interfaces.

The continuance of this constrained CWS/CMS alternative will result in California CWS dependence upon external vendors such as Sphere, CRC, University of California at Davis and Social Solutions for application and reporting services.

This alternative does not support the needs of CWS practice.

- **SACWIS**

This alternative may accommodate the State's commitment to fulfilling SACWIS functional requirements. The delay increases the risk of suspension of SACWIS funding.

This alternative's limitations will result in the maintenance of existing external systems and creation of new systems to support CWS practice, which will jeopardize SACWIS compliance.

- **Timeline**

The timeline to upgrade the existing CWS/CMS has been provided with a focus on the procurement, development, and deployment phases of the alternative.

- **Procurement**

The following table identifies the tasks and durations to execute the procurement process for this alternative.

Figure 17 - CWS/CMS Upgrade – Procurement Duration

Key Dates/Tasks	Develop RFP	County Review of RFP	Revise RFP	Review RFP	Release RFP	Bidders' Conference	Intent to Bid	Q&A	Confidentials	Prepare Addendum	Draft Proposal Evaluation	Draft Confidentials	Q&A	Addendum	Final Proposal Evaluation	Cost Opening	Intent to Award	Protest	Review and Approval	Award Contract	Total Months
Duration in Months	9.00	1.00	1.00	2.00	0.25	0.25	0.00	1.00	0.50	3.00	3.00	0.50	1.00	2.00	3.00	1.00	3.00				31.50

- **Development – Phase 1**

The following table identifies the system and business function capabilities that will be delivered in DD&I - Phase 1.

Table 5-16– CWS/CMS Upgrade – Initial System and Business Functionality

System	Business Function
Application Architecture	Intake Management
Infrastructure	Case Management - Service / Case Plan
Data Conversion (external systems only)	Case Management - Review, Evaluation, Monitoring
Workflow	Court Processing
System Security	Administration
General Functionality	Resource Management
Other Functionality	Quality Assurance
Interfaces	

- **Development – Phase 2**

The following table identifies the business function capabilities that will be delivered in DD&I - Phase 2.

Table 5-17 – CWS/CMS Upgrade – Future System and Business Functionality

System	Business Function
	Adoptions
	Financial Management
	Eligibility
	Critical Functionality Matrix
	New Law, Regulation or Policy capabilities

- **Deployment – Phase 1**

Because this alternative will utilize a centralized architecture and retain the existing workstation software characteristics (look-and-feel), the existing IBM mainframe and DB2 database, and workstation access only requires a Web browser, deployment will be instantaneous to all users the moment that the system comes online. A period of one month has been provided in the timeline to allow for ongoing user support (predominately additional training and question resolution) and for decommissioning previously-distributed architecture components.

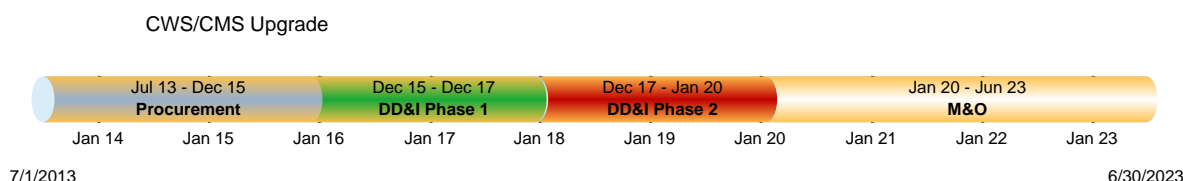
- **Deployment – Phase 2**

Like DD&I - Phase 1, deployment will be instantaneous to all users the moment that DD&I - Phase 2 business function is deployed. A period of one month has been provided in the timeline to allow for ongoing user support (predominately additional training and question resolution).

- **State Fiscal Year (SFY) Allocation**

The following figure shows how the procurement, development and deployment phases will be allocated to state fiscal years during the duration of this alternative.

Figure 18 – CWS/CMS Upgrade – Timeline



- **Risks**

- Inability to agree on terms and conditions with the selected vendor during contract negotiations may delay the schedule and solution delivery date.

- Existing staffing levels may be insufficient to develop and complete the RFP and contracting process.
- Unanticipated tasks associated with the complexities of upgrading the existing system may require additional funding.
- Maintenance costs for the existing system may continue to increase over time and may become cost-prohibitive.
- Inability to incorporate legislative or policy changes in a timely manner or at all, due to technical limitations of the system, may jeopardize continued federal funding and/or incur fines or other penalties.
- Operating with a hybrid of old and new technologies may not lower ongoing costs.
- Policy, regulation, and legislative changes during Design, Development and Implementation (DD&I) may delay the delivery date of the solution and increase costs.

5.3.2 Restart the CWS/Web Project

This alternative will utilize the existing CWS/Web RFP documents and requirements without modification to procure and develop a services-oriented Web-services-based architecture and replacement system for CWS/CMS. A new procurement will begin with the re-release of the CWS/Web RFP. All functionality, including the unfulfilled SACWIS technical requirements and integration of the external systems, will be available to users through a Web browser.

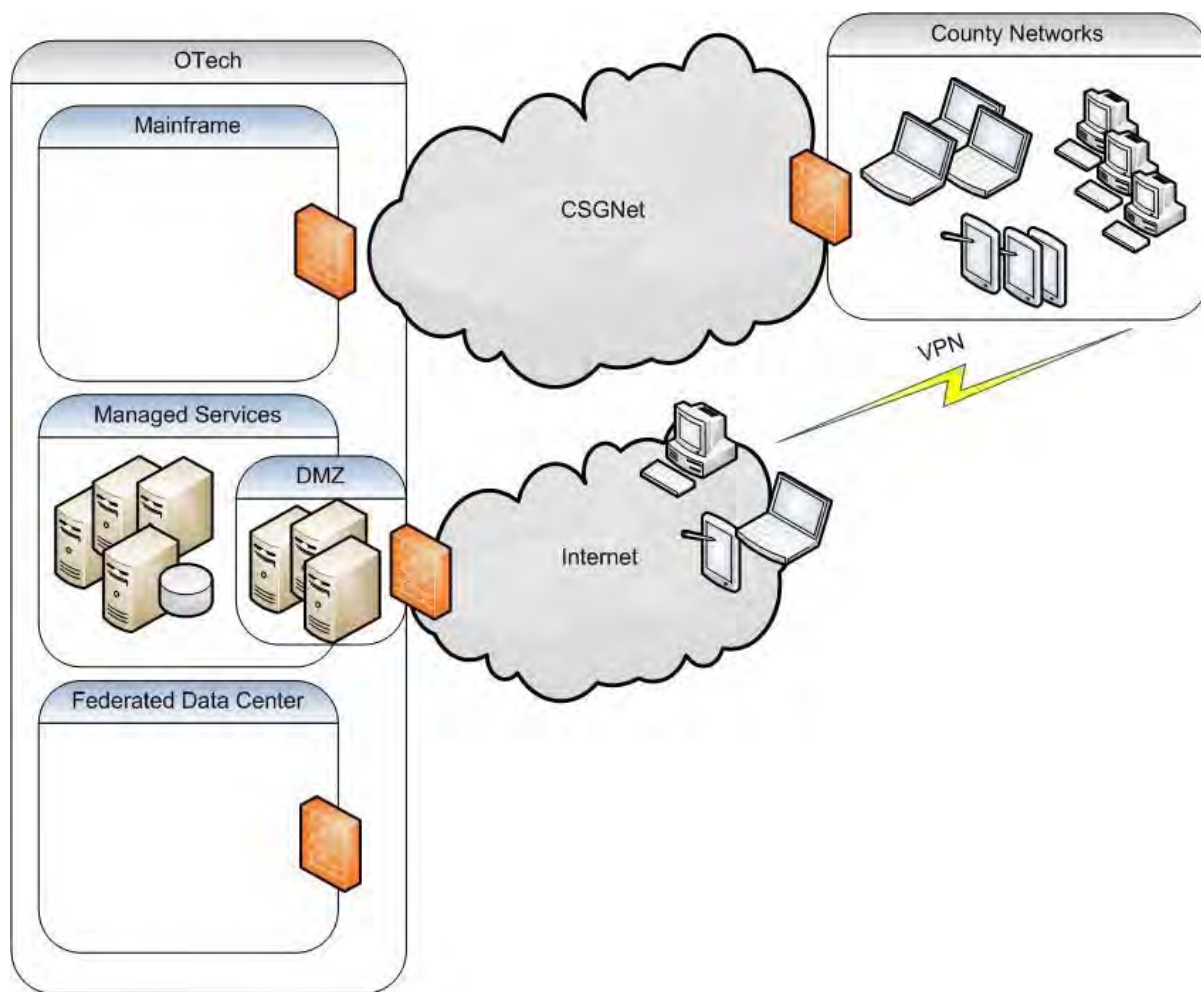
The approach to restarting CWS/Web will:

- Replace distributed computing architecture (servers and software) with centralized components that integrate the Web, the system logic and the database.
- Deliver an architecture based on Web technologies;
- Establish a SOA and support future collaboration with (interfaces to) other systems or services.
- Ensure a browser-based client (delivery of mobility).
- Develop and deliver data exchange interfaces to support interagency information sharing.
- Consolidate existing and external data sources into a single repository.
- Add missing business functionality.
- Enhance business functionality that is operationally insufficient.

The development and deployment of all functionality with this approach will occur over a period of three years. Deployment will occur in the fourth year, using an incremental geographical deployment.

The Restart CWS/Web – Technical Environment figure below illustrates the basic architecture that restarting CWS/Web will utilize. For the user, whether residing at a county, in a state office building or operating outside of the traditional office environment, the sole requirement for system access is a Web browser. Access to centralized application components will depend on the user location and method of connectivity (wireless, wired, Virtual Private Network). The computing infrastructure will be server-based and managed by the State Data Center.

Figure 19 – Restart CWS/Web – Technical Environment



5.3.2.1 Technical Description

CWS/Web will enable the State and counties to connect to the system and interact via Web-standards-based mechanisms. Restarting CWS/Web will facilitate secure access to the application for any authorized user. The architecture will accommodate custom views and impose county-specific workflow preferences.

CWS/Web will provide interoperability between applications and processes, utilizing Web services and messaging components. This leverages other related technologies, providing an architectural framework similar to traditional distributed communications paradigms such as Common Object Request Broker Architecture (CORBA). Service-publication mechanisms allow client applications to discover, locate and invoke Web-service components dynamically.

CWS/Web will be based on an architecture lending itself to the integration of external systems and the rapid development of new services. The system will be adaptable and extensible. Components will be designed in a loosely-coupled fashion to be interchangeable with other external components of similar functionality with limited change to the overall solution.

As an adaptable service-oriented architecture, CWS/Web will provide application development and deployment facilities to allow applications to be integrated and deployed using existing services. The system will allow new services to be created and made available without modification of existing application structures.

Scorecard	
Business	●
Technical	●
SACWIS	●
Time	●
Cost	●
Risk	●
75 percent overall score	

Table 5-18 – Restart CWS/Web – Scorecard

5.3.2.2 Costs

The total project costs for the Restart CWS/Web alternative are estimated to be \$803,095,671 and consist of One-Time IT Project costs and Continuing IT Project costs from SFY 2013-14 through SFY 2022-23.

The estimated One-Time IT Project costs of \$565,484,118 consist of project staffing (including OE&E), solution hardware and software, all vendor and county contracts including the SI, OCM services, data center services, and agency facilities. With approved FFP of 50 percent, the total One-Time IT Project costs to the SGF are estimated to be approximately \$282,742,059, incurred between SFY 2013-14 and through the second quarter of 2020-21.

Total Continuing IT Project costs are estimated at \$53,967,805 annually after full implementation. With approved FFP of 50 percent, the Continuing IT Project costs are estimated to be approximately \$28.5 million annually. This equates to a savings of roughly \$53.4 million per year compared to maintaining the existing system.

Please refer to Section 8 – Economic Analysis Worksheets for the fiscal year and line item cost details of the Alternative #2 Re-Start CWS/Web.

5.3.2.3 Benefits

- The system is planned, specified, designed and documented before any development begins.
- System specifications are very detailed and focus on maximum delivery of business value (aligned with need, law, policy and practice).
- System architecture is aligned with immediate business needs and long-range business objectives.
- SOA and Web technology frameworks facilitate system extensibility and interagency information sharing.
- The use of “services” (loosely coupled units of functionality that individually implement one action) results in:
 - Minimal development time.
 - Simplified maintenance.
 - Isolation of upgrade/enhancement impacts to the service itself.
 - Simplified testing.
 - Maximum potential reuse.

5.3.2.4 Challenges

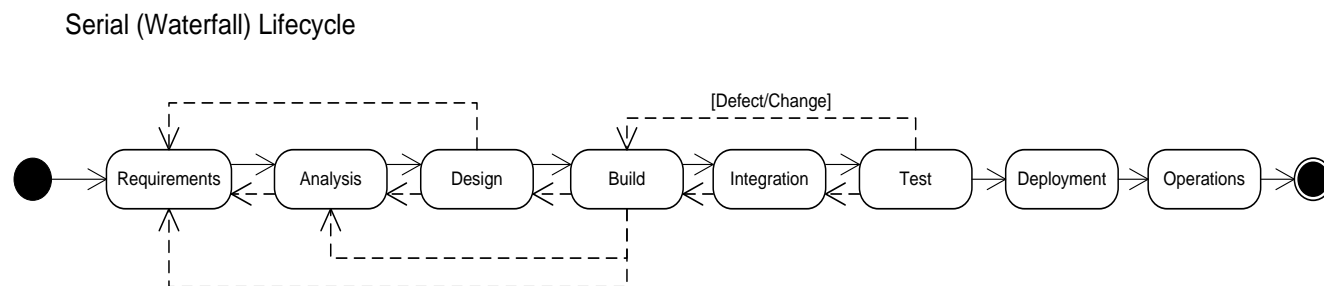
- Relies heavily on written communications between lifecycle phases.
- Integration, system, and acceptance testing cycles are executed after services are fully developed.
- It is difficult to determine the status of product development beyond the status of individual phases.
- The timing of testing makes defect correction more costly and time-consuming, and may delay the delivery of the system because of re-work complexity.
- Issues (what was missed) are often not identified until the test phase.
- The single, complete-system delivery model greatly delays delivery of business value.
- The heavily front-end loaded development lifecycle, involving (complete) system analysis, specification, design, and documentation, results in increased staffing costs and delayed return on investment, as measured by delivery of business value.

- Actual service (functionality) costs are very hard to determine because there is little or no cost segmentation within an individual phase.

- **Methodology**

Requirements for the CWS/Web Restart alternative will be determined at the beginning of the development effort and can be changed only thereafter through application of a very structured change-management process.

Figure 20 – Restart CWS/Web – Lifecycle Methodology



Details of the approach to be taken for restarting CWS/Web can be found in Appendix B – Project Management Plan.

- **Business Assessment**

This alternative will utilize existing CWS/Web RFP documents without modification to procure and develop a replacement system for CWS/CMS. It provides for utilization of CWS/Web RFP requirements that have already been defined, approved, and documented. The CWS/Web RFP requirements include, at a minimum, the critical functionality required for SACWIS and CWS practice. A new procurement will start, re-releasing the CWS/Web RFP to result in development of a new custom application utilizing a Web-services-based architecture. This alternative will continue to utilize CWS/CMS while simultaneously developing the new system, CWS/Web.

This alternative resolves existing navigation, performance, and database-concurrency issues. It reduces duplicate data-entry efforts, and improves data quality and program management reports. It provides for timely implementation of functional changes and increased mobility. As noted in the TAAA report, counties have consistently voiced that the missing SACWIS functionality is a critical part of the capability needed to enhance the ability of CWS workers to provide essential services to children at risk. This alternative serves to meet those business needs.

A CWS worker's responsibilities are working with at-risk children and families, often outside of an office setting. With restarting CWS/Web, mobile access to the system will allow users to retrieve, enter and upload client information from most locations.

This alternative will provide users with better system navigation and ease of data entry. Role-based access will provide the ability to limit and control system access to appropriate parties. Not only will role-based access help CWS workers by allowing them

access only to the information they need to do their job, but it will allow them to work collaboratively with community partners. An example is Differential Response, where an external user (e.g., service provider) can have access to the system. The service provider will have a more limited access to the system and be limited as to what information they can enter. This alternative also supports multidisciplinary case management, where CWS workers collaborate with community-based partners.

Workflow functionality will help CWS workers in their daily activities by generating forms automatically and generating tasks or reminders when needed.

Restarting CWS/Web will allow counties the freedom to maintain their own computers and equipment. This alternative will not require counties to sustain existing levels of equipment and may help reduce their costs for maintaining the system.

This is a new solution that will require statewide implementation training. Due to the fact that the system can be accessed through the Internet, training labs can be easily set up in multiple locations.

This alternative will allow for the implementation of all interfaces as identified in the CWS/Web RFP. This supports the data exchange of client information and the ability for the information to be associated to the client. (One example is a potential interface with the California Department of Child Support Services system.) CWS workers will be able to obtain information critical to investigation and case planning, such as location information and other client-specific information. This alternative will also support the ability to accept real time information from interface partners.

This alternative will support the ability to display views of data for case review. Types of case reviews may include:

- State technical assistance and monitoring
- Court
- Federal reporting
- Eligibility
- Financial management
- Title IV-E audits
- Federal reporting tools

Data integrity will be supported as client data is entered into the system. This alternative will create a framework upon which an improved reporting solution can be built by providing more comprehensive and accurate data, which translates into more timely and improved reporting. It will streamline data collection and improve the ability to report performance measures over time. Improved reports, such as outcome and data accountability reports, will assist CDSS in turn in the production of the following types of reports and documents:

- State legislative reviews and data requests

- Child and Family Services Review (CFSR)
- Annual Progress and Services Review (APSR)
- AFCARS
- NYTD
- NCANDS
- Relative/ Non-Relative Extended Family Members (NFREM) Review
- IV-E Adoptions Assistance Review

This alternative offers one of the better solutions to support CWS practice.

• SACWIS

This alternative will obtain SACWIS compliance.

CWS/Web has been approved and funded at SACWIS FFP levels, subject to ongoing review, by ACF. ACF has agreed to continue SACWIS FFP for both development of CWS/Web and ongoing operation of CWS/CMS, pending implementation of CWS/Web. The current state suspension of CWS/Web may reduce ACF support for continuing SACWIS FFP due to the additional delay over the original approved timeframes. However, to date, ACF remains supportive of California's reassessment process and is unlikely to suspend SACWIS FFP for either CWS/CMS operation or new system planning. Consequently, the state and county share of cost is not likely to increase due to a reduction of FFP.

• Timeline

The timeline for the CWS/Web Restart has been provided with a focus on the procurement, development and deployment phases of the alternative.

• Procurement

The following table identifies the tasks and durations to execute the procurement process for this alternative.

Figure 21 - Restart CWS/Web – Procurement Duration

Key Dates/Tasks	Develop RFP	County Review of RFP	Revise RFP	Review RFP	Release RFP	Bidders' Conference	Intent to Bid	Q&A	Confidentials	Addendum	Draft Proposal Evaluation	Draft Confidentials	Q&A	Addendum	Final Proposal Evaluation	Cost Opening	Intent to Award	Protest	Review and Approval	Award Contract	Total Months
Duration in Months	1.00	0.00	0.50	1.00	0.00	0.25	0.00	0.50	0.50	3.00	4.00	0.50	1.00	3.00	4.00	1.00	3.00				23.25

• Development – Phase 1

The following table identifies the system and business function capabilities that will be delivered in DD&I - Phase 1.

Table 5-19 – Restart CWS/Web – Initial System and Business Functionality

System	Business Function
Application Architecture	Intake Management
Infrastructure	Case Management - Service / Case Plan
Data Conversion (external systems only)	Case Management - Review, Evaluation, Monitoring
Workflow	Court Processing
System Security	Administration
General Functionality	Resource Management
Other Functionality	Quality Assurance
Interfaces	Adoptions
Reporting	Financial Management
	Eligibility

- **CWS/CMS Decommissioning**

The existing CWS/CMS will be decommissioned after delivery of Development - Phase 1.

- **Development – Phase 2**

The following table identifies the business function capabilities that will be delivered in Development - Phase 2.

Table 5-20 – Restart CWS/Web – Future System and Business Functionality

System	Business Function
	Critical Functionality Matrix
	New Law, Regulation or Policy capabilities

- **Deployment – Phase 1**

This approach will utilize an entirely new SOA architecture and workstation access will require only a Web browser. Due to the new architecture (decommissioning the existing CWS/CMS), user interface characteristics will change to accessibility being possible with a Web browser only. With these changes and the addition of new capabilities (mobility and workflow), deployment will be executed in three sequential increments. The first deployment will occur over four months, the next over another period of four months, and the last deployment over a period of six months. County assignment to an increment will be determined during deployment increment planning.

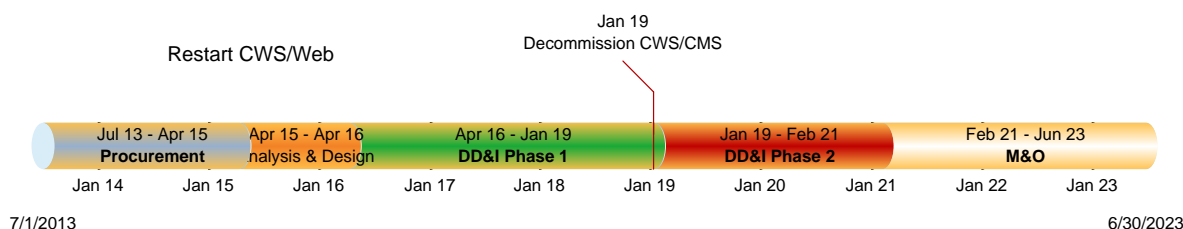
• Deployment – Phase 2

Like Deployment - Phase 1, the Phase 2 deployment will be executed in three sequential increments. The first deployment will occur over four months, the next over another period of four months, and the last deployment over a period of six months.

• State Fiscal Year (SFY) Allocation

The following figure shows how the procurement, development, and deployment phases will be allocated to state fiscal years during the duration of this alternative.

Figure 22 – Restart CWS/Web –Timeline



• Risks

- Existing CWS/CMS system costs may continue to increase while the CWS/Web solution is being developed.
- Existing staffing levels may be insufficient to develop and complete the RFP and contracting process.
- Policy, regulation, and legislative changes during DD&I may delay the delivery date of the solution and increase costs.
- Inability to agree on terms and conditions with the selected vendor during contract negotiations may delay the schedule and solution delivery date.
- Unanticipated tasks associated with the complexities of upgrading the current system may require additional funding.
- The inability to incorporate legislative or policy changes in a timely manner or at all, due to technical limitations of the system, may jeopardize continued federal funding and/or incur fines or other penalties.

5.3.3 Build a New Custom System

5.3.3.1 Technical Description

This option will result in a complete new custom system development effort using none of the existing CWS/CMS application elements. Web technologies and layered architecture will separate the user interface, the application logic and the data. Existing operational business data will be (1) extracted, transformed (as applicable), and loaded into a new database, (2) hosted in a new database engine, and (3) reside on a new database server.

The system can be deployed either:

- As a single complete system by establishing an interim “configuration item” for each service after the test phase, and then releasing all configuration items at once.
- In increments after each service completes its test phase, either to the production environment as a new component/service, or to a sandbox environment for user training, evaluation, and/or practice use.

Scorecard	
Business	●
Technical	●
SACWIS	●
Time	●
Cost	●
Risk	●
87 percent overall score	

Table 5-21 – New System – Custom Approach – Scorecard

5.3.3.2 Costs

The total project costs for the New System Custom alternative are estimated to be \$778,969,417 and consist of One-Time IT Project costs and Continuing IT Project costs from SFY 2013-14 through SFY 2022-23.

The estimated One-Time IT Project costs of \$443,959,430 consist of project staffing (including OE&E), solution hardware and software, all vendor and county contracts including the SI, OCM services, data center services, and agency facilities. With approved FFP of 50 percent, the total One-Time IT Project costs to the SGF are estimated to be approximately \$221,979,715, incurred between SFY 2013-14 and through the second quarter of 2020-21.

Total Continuing IT Project costs are estimated to be \$248,714,025 after full implementation. With approved FFP of 50 percent, the Continuing IT Project costs are estimated to be approximately \$49.7 million annually. This equates to a savings of roughly \$32.0 million per year compared to maintaining the existing system.

Please refer to Section 8 – Economic Analysis Worksheets for the fiscal year and line item cost details of the Alternative #3 New System Custom Approach.

5.3.3.3 Benefits

- Easier to reprioritize increment content/sequence as objectives change.
- Easier to provide frequent demonstration of progress to stakeholders because product segments/functional services will evolve within the increment.
- Smaller scope increments provide flexibility and management of cost when changes to scope and/or requirements are needed.
- Testing occurs informally throughout the increment's product development activities (prototype, analysis, design, and code) and formally as final acceptance activity before deployment, resulting in fewer late-cycle defects.

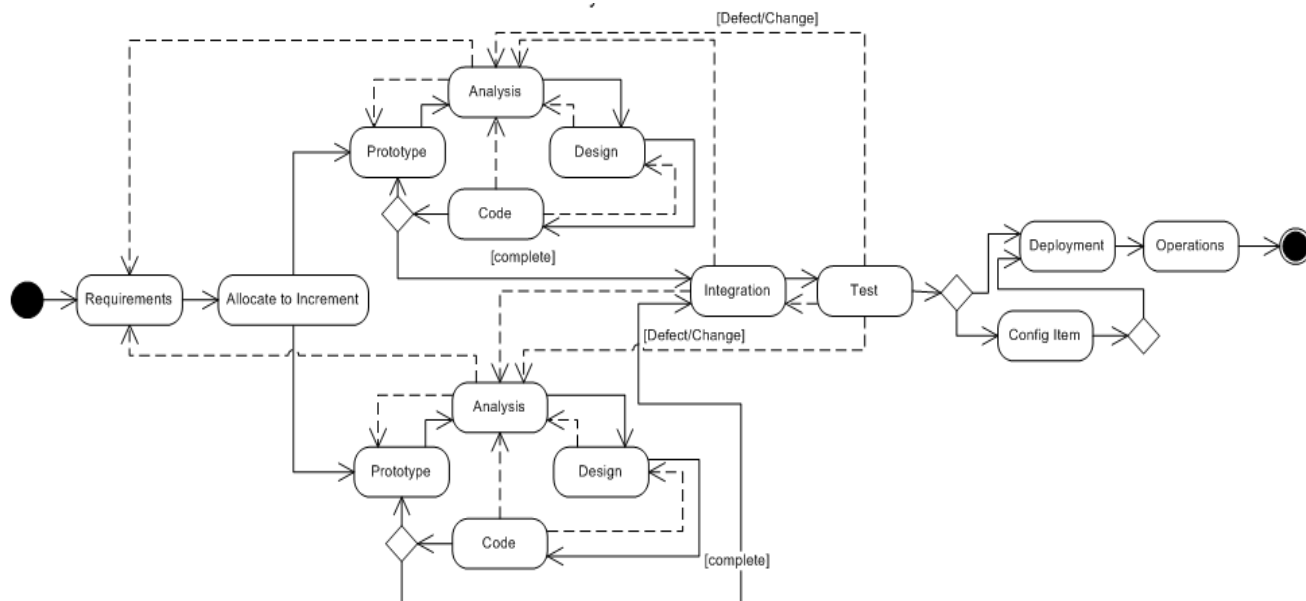
5.3.3.4 Challenges

- Requirements changes may be higher than anticipated because of incomplete, misunderstood, or incorrectly communicated needs or expectations.
- Functional scope and/or complexity may be more than can be completed within the time-box.
- Estimation of the number and duration of increments may result in reprioritization and sequencing, causing schedule delays.

• Methodology

The following diagram shows a custom development lifecycle with two increments, for illustrative purposes. In actual use, the number of increments will be as many as required to complete the objectives where the lifecycle is used.

Figure 23 – New System – Custom Approach – Lifecycle Methodology



Details of the approach to be taken for a custom system development can be found in Appendix B – Project Management Plan.

- **Business Assessment**

This alternative can leverage the existing CWS/Web RFP documents and requirements as a starting point for creating a new system. It provides the opportunity to reassess today's current business practice and legislative needs and incorporate these into the new system.

This alternative provides for a new custom-built application utilizing Web-services-based architecture that meets SACWIS functional requirements. This alternative continues to utilize CWS/CMS while simultaneously developing the new solution. It resolves existing navigation, performance, and database concurrency issues. It reduces duplicate data entry efforts and improves data quality and program management reports. This alternative uses a flexible approach that easily accommodates the addition of new functionality (e.g., requirements discovered during design or mandated by legislation) at a potentially lower cost than the Restart CWS/Web alternative. It provides for the timely implementation of functional changes and increased mobility.

A CWS worker's responsibilities are working with at-risk children and families, often outside of an office setting. With this alternative, mobile access to the system will enable client data entry, upload and retrieval from most locations.

This alternative will provide users with better system navigation and ease of data entry. Role-based access will provide the ability to limit and control system access to appropriate parties. Not only will role-based access help the CWS workers by allowing them access only to the information they need to do their job, but it will allow CWS workers to work collaboratively with community partners. An example is Differential Response, where an external user (e.g., service provider) can have access to the system. The service provider will have a more limited access to the system and be limited as to what information they can enter. This alternative also supports multidisciplinary case management, where CWS workers collaborate with community-based partners.

Workflow functionality will help CWS workers in their daily activities by generating forms automatically and generating tasks or reminders when needed.

This alternative will allow counties the freedom to maintain their own computers and equipment. This alternative will not require counties to sustain existing levels of equipment and may help reduce their costs for maintaining the system.

This is a new solution that will require statewide implementation training. Because the system will be accessible through the Internet, training labs can be easily set up in multiple locations.

This alternative will allow for the implementation of all interfaces listed in the Critical Functionality spreadsheet, and support the data exchange of client information and the ability for the information to be associated to the client. (One example is a potential interface with the California Department of Child Support Services system.) CWS will be able to obtain information critical to investigation and case planning, such as location

information and other client specific information, and be able to receive real-time information from interface partners.

This alternative supports the ability to display views of data for case review. Types of case reviews may include:

- State technical assistance and monitoring
- Court
- Federal reporting
- Eligibility
- Financial management
- Title IV-E audits
- Federal reporting tools

Data integrity will be supported as client data is entered into the system.

This alternative will create a framework upon which an improved reporting solution can be built by providing provide more comprehensive and accurate data, which translates into more timely and improved reporting. It will streamline data collection and improve the ability to report performance measures over time. Improved reports, such as outcome and data accountability reports, will assist CDSS in the production of the following types of reports and documents:

- California CSFR II
- APSR
- AFCARS
- NYTD
- NCANDS
- Relative NFREM Review
- IV-E Adoptions Assistance Review

This alternative offers one of the better solutions to support CWS practice.

- **SACWIS**

This alternative can achieve SACWIS compliance. The development technique of designing and using system functionality components during the development process will facilitate SACWIS compliance by the final product. Quicker implementation and a higher level of user acceptability at the end of the design phase will increase the likelihood of full utilization and complete functionality at the point of the formal federal compliance review. Consequently, ACF is less likely to suspend or require payback of SACWIS FFP for CWS/CMS and the new system development under this alternative. This alternative may also be more flexible, in that if ACF reduces SACWIS requirements, it will be easier to halt work on increments that are no longer needed.

However, any delay in developing functionality increments will cause greater overall delay, risking an increase in state/county share of cost for both CWS/CMS and the new system if SACWIS FFP is suspended as a result.

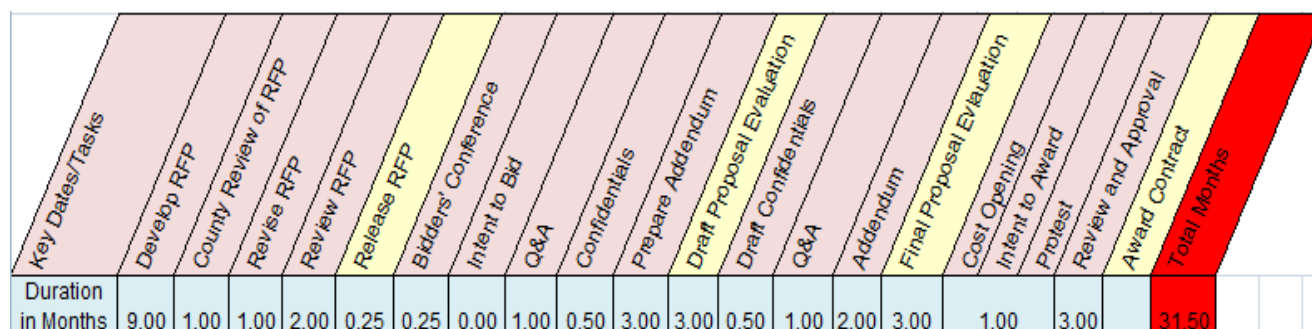
- **Timeline**

The timeline to build a new custom CWS system has been provided with a focus on the procurement, development and deployment phases of the alternative.

- **Procurement**

The following table identifies the tasks and durations to execute the procurement process for this alternative.

Figure 24 - New System – Custom Approach – Procurement Duration



- **Development – Phase 1**

The following table identifies the system and business function capabilities that will be delivered in Development - Phase 1.

Table 5-22 – New System – Custom Approach – Initial System and Business Functionality

System	Business Function
Application Architecture	Intake Management
Infrastructure	Case Management - Service / Case Plan
Data Conversion (external systems only)	Case Management - Review, Evaluation, Monitoring
Workflow	Court Processing
System Security	Administration
General Functionality	Resource Management
Other Functionality	Quality Assurance
Reporting	

- **CWS/CMS Decommissioning**

The existing CWS/CMS will be decommissioned after delivery of Development - Phase 1.

- **Development – Phase 2**

The following table identifies the business function capabilities that will be delivered in Development - Phase 2.

Table 5-23 – New System – Custom Approach – Future System and Business Functionality

System	Business Function
	Adoptions
	Financial Management
	Eligibility
	Interfaces
	Critical Functionality Matrix
	New Law, Regulation or Policy capabilities

- **Deployment – Phase 1**

Because this approach utilizes a centralized architecture and workstation access requires only a Web browser, deployment will be instantaneous to all users the moment that the system comes online. A period of one month has been provided in the timeline to allow for ongoing user support (predominately additional training and question resolution) and decommissioning of the previously distributed architecture components.

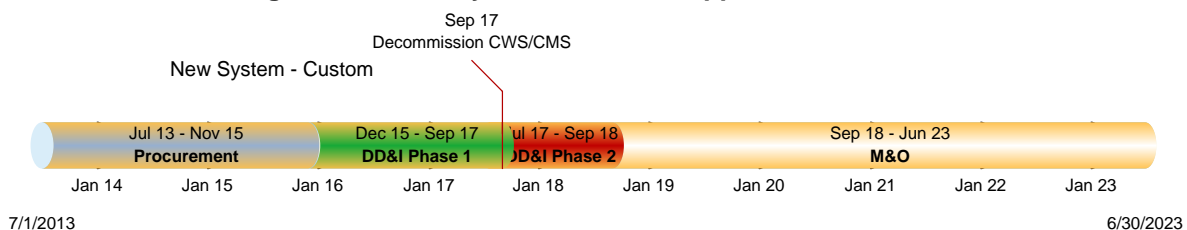
- **Deployment – Phase 2**

Like Deployment - Phase 1, the Development – Phase 2 deployment will be instantaneous to all users the moment that phase 2 business function is deployed. A period of one month has been provided in the timeline to allow for ongoing user support (predominately additional training and question resolution).

- **State Fiscal Year (SFY) Allocation**

The following figure shows how the procurement, development and deployment phases will be allocated to state fiscal years during the duration of this alternative.

Figure 25 – New System – Custom Approach – Timeline



- **Risks**

- Inability to agree on terms and conditions with the selected vendor during contract negotiations may delay the schedule and delivery date of the solution.
- Existing staffing levels may be insufficient to develop and complete the RFP and contracting process.
- Policy, regulation, and legislative changes during DD&I may delay the delivery date of the solution and increase costs.
- Existing CWS/CMS system costs may continue to increase while the new system is being developed.
- Unanticipated tasks associated with the complexities of upgrading the current system may require additional funding.
- The inability to incorporate legislative or policy changes in a timely manner or at all, due to technical limitations of the system, may jeopardize continued federal funding and/or incur fines or other penalties.

6 Project Management Plan

The purpose of the Project Management Plan (PMP) is to provide project management, project staff, and project stakeholders with an approved working guide that details how the CWS-NS Project activities and deliverables will be managed throughout the project lifecycle phases. The PMP is the plan that facilitates integration management on the CWS-NS Project. As described in the Project Management Body of Knowledge (PMBOK®) framework, integration management includes the processes required to ensure the various elements of the project are properly coordinated. Integration management involves making tradeoffs among competing objectives and alternatives in order to meet or exceed stakeholder needs and expectations. Integration management is a key aspect of project management and a primary activity of the CWS-NS Project Manager. The CWS-NS Project Manager must have the information to understand the scope of work, the objectives, resources, responsibilities, milestones, status, risks, and issues of the project. This PMP establishes the framework for integrating and managing the various project management areas.

This PMP defines how project planning, project execution, project monitoring and control, and closing phases will be managed. In addition, the management of unanticipated tasks, the project schedule, and tailoring to achieve phase close-out/lessons learned project activities are defined within the PMP.

While summary narrative will be provided in most of the following sub-sections, a complete PMP for the CWS-NS Project is provided in Appendix B – Project Management Plan.

6.1 Project Organization

The CWS-NS Project has been organized in a manner to build a collaborative environment for the project and the program to maximize the delivery of the business value of the project. The Organization Chart reflects both the project and program organizations in terms of their individual administrative and technical elements, as well as the interdependencies and cross-functional support they provide to each other. Refer to Appendix C – CWS-NS Project Organization Chart and Appendix D – CWS-NS Project Roles and Responsibilities.

6.2 Project Plan

While the Project Management Plan (PMP) defines the approach(s) to the execution of all aspects of the project, the project schedule focuses on the specific tasks, deliverables and milestones that are assigned to and completed by the project team. A Microsoft (MS) Project schedule is provided in Appendix E – CWS-NS Project Schedule that captures the high-level tasks, resource assignments, task dependencies and milestones for the project. This MS Project schedule will continue to go through expansion and refinement during the life of the project.

6.2.1 Project Phasing

Project phasing is expressed from two perspectives. One perspective is based on functional segmentation of the work as defined in the project schedule. This project schedule is provided in Appendix E – CWS-NS project Schedule and identifies the phases of the system delivery.

The other is based on the conceptual organization of the work as defined in the Work Breakdown Schedule (WBS). For this FSR, the elements of the WBS are provided in Appendix A - Project Management Plan. Appendix E – CWS-NS project Schedule is focused on WBS element 3.0 – Develop CWS-NS System. The detail for the other WBS elements will be added to the schedule after the project FSR is approved, the project is chartered is executed and the core project team is assembled and work commences.

Following the stages (phases) outlined in the CA-PMM, the following are the primary deliverables for each phase.

Table 6-1 - Project Phases and Deliverables Roles and Responsibilities

Project Phase	Phase Deliverables
Establish/Maintain Environments	<ul style="list-style-type: none"> • Computing Hardware/Software (OS & SOA) Acquisition • Computing Hardware/Software (OS & SOA) Installation • SOA Infrastructure (Application Architecture) Configuration • Development/Sandbox Environment Delivery • Test/Training Environment Delivery • Infrastructure Delivery
Data Conversion	<ul style="list-style-type: none"> • Data Conversion Process Definition • Data Conversion Tool Delivery • Database Population (data migration – including BLOB's)
DD&I – Phase 1 Core Services Configuration	<ul style="list-style-type: none"> • Core Services (purchased) Capability Configuration • Report Validation/Design • Report Delivery • Data Exchange Interface Validation/Design • Data Exchange Interface Delivery • Workflow Process Definition • Workflow Rules Definition • SOA Workflow Engine Configuration • SOA Registry Update

Project Phase	Phase Deliverables
	<ul style="list-style-type: none"> • SOA Rules Engine Update • Core System Test and Acceptance
DD&I - Phase 1 Custom Services Development	<ul style="list-style-type: none"> • Phase 1 Custom Service Increments Design • Phase 1 Custom Service Increments Delivery • Phase 1 Custom Service Increments Test and Acceptance
DD&I - Phase 1 Custom Services Implementation	<ul style="list-style-type: none"> • Integration/System Testing • User Acceptance Testing • Training • Production System Delivery
DD&I – Phase 2 Custom Service Development	<ul style="list-style-type: none"> • Phase 2 Custom Service Increments Design • Phase 2 Custom Service Increments Delivery • Phase 2 Custom Service Increments Test and Acceptance
DD&I - Phase 2 Custom Services Implementation	<ul style="list-style-type: none"> • Integration/System Testing • User Acceptance Testing • Training • Production System Update

6.2.2 Project Schedule

While the Project Management Plan (PMP) defines the approach(s) to the execution of all aspects of the project, the project schedule focuses on the specific tasks, deliverables and milestones that are assigned to and completed by the project team. A Microsoft (MS) Project schedule is provided in Appendix E – CWS-NS project Schedule that captures the high-level tasks, resource assignments, task dependencies and milestones for the project. This MS Project schedule will continue to go through expansion and refinement during the life of the project.

6.3 Authorization Required

This project requires approval from the following:

- CDSS Chief Information Officer
- CDSS Budget Officer
- CDSS Department Director
- Acting Agency Chief Information Officer
- CHHS Agency Secretary
- Department of Finance

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7 Risk Management Plan

The CWS-NS project will utilize Risk Radar® as the project risk database. The CWS-NS project Risk Management Plan (see Appendix F) contains a detailed description of the design, capabilities and operation of Risk Radar®.

The CWS-NS project Risk Management Plan also identifies the use of the Management Tracking System (MTSII) to track execution of mitigation and contingency action plans. This workflow tool will provide the Risk Manager and Risk Analyst with monitoring capabilities on risk status mitigation or contingency plan execution. Risks that require approval from the Project Manager in order for the associated activities to proceed will also be monitored in MTSII. MTSII is an extension of the risk register function and is a critical tool in the execution of project risk management.

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8 Economic Analysis Worksheets (EAWS)

Appendices

Appendix A

Report to the Legislature: Child Welfare Services Automation Study

Appendix B

CWS-NS Project Management Plan

Appendix C

CWS-NS Organization Charts

Appendix D

CWS-NS Project Roles and Responsibilities

Appendix E

CWS-NS Project Schedule

Appendix F

CWS-NS Risk Management Plan

Appendix G

CWS-NS Business Process Workflows/Use Cases

Appendix H

CWS-NS Technical Architecture Vision

Appendix I

CWS-NS Evaluation Framework

Appendix J

CWS-NS SIMM 20D – Questionnaire for Information Systems

Appendix K

CWS-NS Validation of Buy/Build Approach

Appendix L

CWS-NS CMS-CWS Governance Structure 2011

Appendix M

Ten Year EAW

Appendix N

OSI and CDSS

FY 2013/14

Budget Change Proposal Workload Analysis

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs														
Staff (Salaries & Benefits)	31.0	3,289,316	33.0	3,502,642	42.0	4,469,978	52.5	5,641,459	14.0	1,507,988	0.0	0	172.5	18,411,385
Hardware Purchase		0		0		1,209,000		744,000		186,000		0		2,139,000
Software Purchase/License		0		0		37,854,340		8,116,175		2,029,044		0		47,999,559
Telecommunications		0		0		0		0		0		0		0
Contract Services														
Software Customization		0		0		10,051,096		11,244,846		2,929,962		0		24,225,904
Project Management		0		0		0		0		0		0		0
Project Oversight		127,842		127,842		127,842		127,842		31,961		0		543,330
IV&V Services		317,520		425,376		788,256		788,256		52,416		0		2,371,824
Other Contract Services		4,260,996		5,569,504		10,305,929		14,710,731		7,563,165		0		42,410,325
TOTAL Contract Services		4,706,358		6,122,722		21,273,124		26,871,676		10,577,503		0		69,551,382
Data Center Services		247,955		247,955		734,360		734,360		183,590		0		2,148,220
Agency Facilities		392,000		1,171,930		348,140		343,140		85,785		0		2,340,995
Other		1,666,417		22,604,154		62,665,150		79,482,339		42,083,130		0		208,501,190
Total One-time IT Costs	31.0	10,302,046	33.0	33,649,404	42.0	128,554,092	52.5	121,933,149	14.0	56,653,040	0.0	0	172.5	351,091,731
Continuing IT Project Costs														
Staff (Salaries & Benefits)	0.0	0	0.0	0	0.0	0	0.0	0	30.0	3,388,470	40.0	4,517,960	70.0	7,906,431
Hardware Lease/Maintenance		0		0		0		0		558,000		744,000		1,302,000
Software Maintenance/Licenses		0		0		0		0		6,087,131		8,116,175		14,203,306
Telecommunications		0		0		0		0		0		0		0
Contract Services		0		0		0		0		5,248,658		6,951,544		12,200,201
Data Center Services		0		0		0		0		559,770		746,360		1,306,130
Agency Facilities		0		0		0		0		257,355		343,140		600,495
Other		0		0		0		0		1,679,475		2,450,255		4,129,730
Total Continuing IT Costs	0.0	0	0.0	0	0.0	0	0.0	0	30.0	17,778,859	40.0	23,869,434	70.0	41,648,293
Total Project Costs	31.0	10,302,046	33.0	33,649,404	42.0	128,554,092	52.5	121,933,149	44.0	74,431,899	40.0	23,869,434	242.5	392,740,024
Continuing Existing Costs														
Information Technology Staff	49.5	4,665,953	47.5	4,423,339	38.5	3,324,207	26.5	1,811,219	5.6	452,805	0.0	0	167.6	14,677,523
Other IT Costs		75,182,501		75,986,917		76,819,750		77,682,251		19,643,219		0		325,314,638
Total Continuing Existing IT Costs	49.5	79,848,454	47.5	80,410,256	38.5	80,143,957	26.5	79,493,470	5.6	20,096,024	0.0	0	167.6	339,992,161
Program Staff	13.0	1,162,650	13.0	1,162,650	13.0	1,162,650	13.0	1,162,650	15.3	1,416,593	16.0	1,501,241	83.3	7,568,432
Other Program Costs		84,446,069		84,446,069		84,446,069		84,446,069		84,446,069		84,446,069		506,676,414
Total Continuing Existing Program Costs	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	15.3	85,862,662	16.0	85,947,310	83.3	514,244,846
Total Continuing Existing Costs	62.5	165,457,173	60.5	166,018,975	51.5	165,752,676	39.5	165,102,189	20.9	105,958,686	16.0	85,947,310	250.9	854,237,006
TOTAL ALTERNATIVE COSTS	93.5	175,759,219	93.5	199,668,379	93.5	294,306,767	92.0	287,035,337	64.9	180,390,585	56.0	109,816,743	493.4	1,246,977,030
INCREASED REVENUES		0		0		0		0		0		0		0

EXISTING SYSTEM/BASELINE COST WORKSHEET

Department: California Department of Social Services

All costs to be shown in whole (unrounded) dollars.

Date Prepared: 10/1/12

Project: Child Welfare Services New System

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		SUBTOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Continuing Information														
Technology Costs														
Staff (salaries & benefits)	49.5	4,665,953	49.5	4,665,953	49.5	4,665,953	49.5	4,665,953	49.5	4,665,953	49.5	4,665,953	297.0	27,995,718
Hardware Lease/Maintenance		1,442,880		1,442,880		1,442,880		1,442,880		1,442,880		1,442,880		8,657,280
Software Maintenance/Licenses		2,586,908		2,586,908		2,586,908		2,586,908		2,586,908		2,586,908		15,521,448
Contract Services		33,327,048		34,131,464		34,964,297		35,826,798		36,717,423		37,641,179		212,608,209
Data Center Services		35,986,634		35,986,634		35,986,634		35,986,634		35,986,634		35,986,634		215,919,804
Agency Facilities		0		0		0		0		0		0		0
Other		1,839,031		1,839,031		1,839,031		1,839,031		1,839,031		1,839,031		11,034,186
Total IT Costs	49.5	79,848,454	49.5	80,652,870	49.5	81,485,703	49.5	82,348,204	49.5	83,238,829	49.5	84,162,585	297.0	491,736,645
Continuing Program Costs:														
Staff	13.0	1,162,650	13.0	1,162,650	13.0	1,162,650	13.0	1,162,650	13.0	1,162,650	13.0	1,162,650	78.0	6,975,897
Other		84,446,069		84,446,069		84,446,069		84,446,069		84,446,069		84,446,069		506,676,414
Total Program Costs	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	78.0	513,652,311
TOTAL EXISTING SYSTEM COSTS	62.5	165,457,173	62.5	166,261,589	62.5	167,094,422	62.5	167,956,923	62.5	168,847,548	62.5	169,771,304	375.0	1,005,388,956

EXISTING SYSTEM/BASELINE COST WORKSHEET

All costs to be shown in whole (unrounded) dollars.

Date Prepared: 10/1/12

	Subtotal		FY 2019/20		FY 2020/2021		FY 2021/22		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Continuing Information										
Technology Costs										
Staff (salaries & benefits)	297.0	27,995,718	49.5	4,665,953	49.5	4,665,953	49.5	4,665,953	445.5	41,993,577
Hardware Lease/Maintenance		8,657,280		1,442,880		1,442,880		1,442,880		12,985,920
Software Maintenance/Licenses		15,521,448		2,586,908		2,586,908		2,586,908		23,282,172
Contract Services		212,608,209		35,027,453		35,027,453		35,027,453		317,690,568
Data Center Services		215,919,804		35,986,634		35,986,634		35,986,634		323,879,706
Agency Facilities		0		0		0		0		0
Other		11,034,186		1,839,031		1,839,031		1,839,031		16,551,279
Total IT Costs	297.0	491,736,645	49.5	81,548,859	49.5	81,548,859	49.5	81,548,859	445.5	736,383,222
Continuing Program Costs:										
Staff	78.0	6,975,897	13.0	1,162,650	13.0	1,162,650	13.0	1,162,650	117.0	10,463,846
Other		506,676,414		84,446,069		84,446,069		84,446,069		760,014,621
Total Program Costs	78.0	513,652,311	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	117.0	770,478,467
TOTAL EXISTING SYSTEM COSTS	375.0	1,005,388,956	62.5	167,157,578	62.5	167,157,578	62.5	167,157,578	562.5	1,506,861,689

Department: California Department of Social Services

All Costs Should be shown in whole (unrounded) dc

Project: Child Welfare Services New System

	SUBTOTAL		FY 2019/20		FY 2020/2021		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs								
Staff (Salaries & Benefits)	263.0	26,389,243	45.0	4,524,092	0.0	0	308.0	30,913,335
Hardware Purchase		131,200		0		0		131,200
Software Purchase/License		1,078,000		187,600		0		1,265,600
Telecommunications		0		0		0		0
Contract Services								
Software Customization		80,303,353		14,773,080		0		95,076,433
Project Management		3,497,472		582,912		0		4,080,384
Project Oversight		3,294,720		549,120		0		3,843,840
IV&V Services		3,734,016		658,944		0		4,392,960
Other Contract Services		48,332,588		5,049,434		0		53,382,022
TOTAL Contract Services		139,162,149		21,613,490		0		160,775,639
Data Center Services		1,063,848		52,308		0		1,116,156
Agency Facilities		0		0		0		0
Other		260,221,532		3,897,956		0		264,119,488
Total One-time IT Costs	263.0	428,045,972	45.0	30,275,446	0.0	0	308.0	458,321,418
Continuing IT Project Costs								
Staff (Salaries & Benefits)	38.0	3,914,194	19.0	1,957,097	50.0	5,138,960	107.0	11,010,251
Hardware Lease/Maintenance		82,600		41,300		56,000		179,900
Software Maintenance/Licenses		330,400		165,200		224,000		719,600
Telecommunications		0		0		0		0
Contract Services		99,977,978		49,988,989		55,278,989		205,245,956
Data Center Services		1,604,616		802,308		802,308		3,209,232
Agency Facilities		0		0		0		0
Other		10,802,848		5,449,424		7,081,388		23,333,660
Total Continuing IT Costs	38.0	116,712,636	19.0	58,404,318	50.0	68,581,645	107.0	243,698,599
Total Project Costs	301.0	544,758,608	64.0	88,679,764	50.0	68,581,645	415.0	702,020,017
Continuing Existing Costs								
Information Technology Staff	198.0	18,663,812	0.0	0	0.0	0	198.0	18,663,812
Other IT Costs		312,671,419		0		0		312,671,419
Total Continuing Existing IT Costs	198.0	331,335,231	0.0	0	0.0	0	198.0	331,335,231
Program Staff	78.0	6,975,897	16.0	1,501,241	16.0	1,501,241	110.0	9,978,379
Other Program Costs		506,676,414		84,446,069		84,446,069		675,568,552
Total Continuing Existing Program Costs	78.0	513,652,311	16.0	85,947,310	16.0	85,947,310	110.0	685,546,931
Total Continuing Existing Costs	276.0	844,987,542	16.0	85,947,310	16.0	85,947,310	308.0	1,016,882,162
TOTAL ALTERNATIVE COSTS	577.0	1,389,746,150	80.0	174,627,074	66.0	154,528,955	723.0	1,718,902,179
INCREASED REVENUES		0		0		0		0

Department: California Department of Social Services

All Costs Should be shown in whole (unrounded) dollars.

Project: Child Welfare Services New System

	SUBTOTAL		FY 2019/20		FY 2020/2021		FY 2021/22		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs										
Staff (Salaries & Benefits)	288.0	29,359,542	48.0	4,893,257	48.0	4,893,257	0.0	0	384.0	39,146,056
Hardware Purchase		185,600		0		0		0		185,600
Software Purchase/License		1,142,400		190,400		190,400		0		1,523,200
Telecommunications		0		0		0		0		0
Contract Services										
Software Customization		121,504,925		23,005,183		5,577,146		0		150,087,254
Project Management		3,571,200		595,200		297,600		0		4,464,000
Project Oversight		3,294,720		549,120		274,560		0		4,118,400
IV&V Services		4,063,488		658,944		329,472		0		5,051,904
Other Contract Services		50,911,293		5,388,264		3,436,799		0		59,736,357
TOTAL Contract Services		183,345,626		30,196,711		9,915,577		0		223,457,915
Data Center Services		1,063,848		52,308		52,308		0		1,168,464
Agency Facilities		0		0		0		0		0
Other		291,523,339		4,239,772		4,239,772		0		300,002,883
Total One-time IT Costs	288.0	506,620,355	48.0	39,572,448	48.0	19,291,314	0.0	0	384.0	565,484,118
Continuing IT Project Costs										
Staff (Salaries & Benefits)	15.0	1,582,176	15.0	1,582,176	15.0	1,582,176	50.0	5,138,960	95.0	9,885,488
Hardware Lease/Maintenance		38,500		38,500		38,500		56,000		171,500
Software Maintenance/Licenses		154,000		154,000		154,000		224,000		686,000
Telecommunications		0		0		0		0		0
Contract Services		35,478,149		35,375,149		35,375,149		40,665,149		146,893,596
Data Center Services		802,308		802,308		802,308		802,308		3,209,232
Agency Facilities		0		0		0		0		0
Other		5,238,848		5,238,848		5,238,848		7,081,388		22,797,932
Total Continuing IT Costs	15.0	43,293,981	15.0	43,190,981	15.0	43,190,981	50.0	53,967,805	95.0	183,643,748
Total Project Costs	303.0	549,914,336	63.0	82,763,429	63.0	62,482,295	50.0	53,967,805	479.0	749,127,866
Continuing Existing Costs										
Information Technology Staff	247.5	23,329,765	0.0	0	0.0	0	0.0	0	247.5	23,329,765
Other IT Costs		399,244,295		0		0		0		399,244,295
Total Continuing Existing IT Costs	247.5	422,574,060	0.0	0	0.0	0	0.0	0	247.5	422,574,060
Program Staff	78.0	6,975,897	13.0	1,162,650	16.0	1,501,241	16.0	1,501,241	123.0	11,141,028
Other Program Costs		506,676,414		84,446,069		84,446,069		84,446,069		760,014,621
Total Continuing Existing Program Costs	78.0	513,652,311	13.0	85,608,719	16.0	85,947,310	16.0	85,947,310	123.0	771,155,649
Total Continuing Existing Costs	325.5	936,226,371	13.0	85,608,719	16.0	85,947,310	16.0	85,947,310	370.5	1,193,729,709
TOTAL ALTERNATIVE COSTS	628.5	1,486,140,708	76.0	168,372,148	79.0	148,429,604	66.0	139,915,115	849.5	1,942,857,575
INCREASED REVENUES		0		0		0		0		0

ECONOMIC ANALYSIS SUMMARY

Department: California Department of Social Services

All costs to be shown in whole (unrounded) dollars.

Project: Child Welfare Services New System

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		SUBTOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
EXISTING SYSTEM														
Total IT Costs	49.5	79,848,454	49.5	80,652,870	49.5	81,485,703	49.5	82,348,204	49.5	83,238,829	49.5	84,162,585	297.0	491,736,645
Total Program Costs	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	78.0	513,652,311
Total Existing System Costs	62.5	165,457,173	62.5	166,261,589	62.5	167,094,422	62.5	167,956,923	62.5	168,847,548	62.5	169,771,304	375.0	1,005,388,956
PROPOSED ALTERNATIVE														
New System Buy/Build Approach														
Total Project Costs	31.0	10,302,046	33.0	33,649,404	42.0	128,554,092	52.5	121,933,149	44.0	74,431,899	40.0	23,869,434	242.5	392,740,024
Total Cont. Exist. Costs	62.5	165,457,173	60.5	166,018,975	51.5	165,752,676	39.5	165,102,189	20.9	105,958,686	16.0	85,947,310	250.9	854,237,006
Total Alternative Costs	93.5	175,759,219	93.5	199,668,379	93.5	294,306,767	92.0	287,035,337	64.9	180,390,585	56.0	109,816,743	493.4	1,246,977,030
COST SAVINGS/AVOIDANCES	(31.0)	(10,302,046)	(31.0)	(33,406,790)	(31.0)	(127,212,346)	(29.5)	(119,078,415)	(2.4)	(11,543,037)	6.5	59,954,560	(118.4)	(241,588,074)
Increased Revenues		0		0		0		0		0		0		0
Net (Cost) or Benefit	(31.0)	(10,302,046)	(31.0)	(33,406,790)	(31.0)	(127,212,346)	(29.5)	(119,078,415)	(2.4)	(11,543,037)	6.5	59,954,560	(118.4)	(241,588,074)
Cum. Net (Cost) or Benefit	(31.0)	(10,302,046)	(62.0)	(43,708,836)	(93.0)	(170,921,182)	(122.5)	(289,999,597)	(124.9)	(301,542,634)	(118.4)	(241,588,074)		
ALTERNATIVE #1														
CWS/CMS Upgrade														
Total Project Costs	38.0	16,163,671	45.0	56,440,165	45.0	102,655,481	45.0	144,224,977	64.0	136,568,950	64.0	88,705,364	301.0	544,758,608
Total Cont. Exist. Costs	62.5	165,457,173	62.5	166,261,589	62.5	167,094,422	62.5	167,956,923	13.0	92,608,719	13.0	85,608,719	276.0	844,987,542
Total Alternative Costs	100.5	181,620,843	107.5	222,701,754	107.5	269,749,902	107.5	312,181,899	77.0	229,177,668	77.0	174,314,083	577.0	1,389,746,150
COST SAVINGS/AVOIDANCES	(38.0)	(16,163,671)	(45.0)	(56,440,165)	(45.0)	(102,655,481)	(45.0)	(144,224,977)	(14.5)	(60,330,121)	(14.5)	(4,542,779)	(202.0)	(384,357,194)
Increased Revenues		0		0		0		0		0		0		0
Net (Cost) or Benefit	(38.0)	(16,163,671)	(45.0)	(56,440,165)	(45.0)	(102,655,481)	(45.0)	(144,224,977)	(14.5)	(60,330,121)	(14.5)	(4,542,779)	(202.0)	(384,357,194)
Cum. Net (Cost) or Benefit	(38.0)	(16,163,671)	(83.0)	(72,603,836)	(128.0)	(175,259,317)	(173.0)	(319,484,294)	(187.5)	(379,814,415)	(202.0)	(384,357,194)		
ALTERNATIVE #2														
Re-Start CWS/Web														
Total Project Costs	48.0	19,292,492	48.0	70,503,670	48.0	115,336,809	48.0	144,740,116	48.0	117,120,421	63.0	82,920,829	303.0	549,914,336
Total Cont. Exist. Costs	62.5	165,457,173	62.5	166,261,589	62.5	167,094,422	62.5	167,956,923	62.5	168,847,548	13.0	100,608,719	325.5	936,226,371
Total Alternative Costs	110.5	184,749,664	110.5	236,765,259	110.5	282,431,230	110.5	312,697,038	110.5	285,967,968	76.0	183,529,548	628.5	1,486,140,708
COST SAVINGS/AVOIDANCES	(48.0)	(19,292,492)	(48.0)	(70,503,670)	(48.0)	(115,336,809)	(48.0)	(144,740,116)	(48.0)	(117,120,421)	(13.5)	(13,758,244)	(253.5)	(480,751,751)
Increased Revenues		0		0		0		0		0		0		0
Net (Cost) or Benefit	(48.0)	(19,292,492)	(48.0)	(70,503,670)	(48.0)	(115,336,809)	(48.0)	(144,740,116)	(48.0)	(117,120,421)	(13.5)	(13,758,244)	(253.5)	(480,751,751)
Cum. Net (Cost) or Benefit	(48.0)	(19,292,492)	(96.0)	(89,796,162)	(144.0)	(205,132,971)	(192.0)	(349,873,086)	(240.0)	(466,993,507)	(253.5)	(480,751,751)		
ALTERNATIVE #3														
New System Custom Approach														
Total Project Costs	38.0	14,622,335	49.0	53,967,931	49.0	136,945,000	64.0	182,136,008	64.0	142,584,119	50.0	48,684,805	314.0	578,940,197
Total Cont. Exist. Costs	62.5	165,457,173	62.5	166,261,589	62.5	167,094,422	13.0	92,608,719	13.0	85,608,719	16.0	85,947,310	229.5	762,977,929
Total Alternative Costs	100.5	180,079,507	111.5	220,229,520	111.5	304,039,421	77.0	274,744,727	77.0	228,192,838	66.0	134,632,115	543.5	1,341,918,127
COST SAVINGS/AVOIDANCES	(38.0)	(14,622,335)	(49.0)	(53,967,931)	(49.0)	(136,945,000)	(14.5)	(106,787,804)	(14.5)	(59,345,290)	(3.5)	35,139,189	(168.5)	(336,529,170)
Increased Revenues		0		0		0		0		0		0		0
Net (Cost) or Benefit	(38.0)	(14,622,335)	(49.0)	(53,967,931)	(49.0)	(136,945,000)	(14.5)	(106,787,804)	(14.5)	(59,345,290)	(3.5)	35,139,189	(168.5)	(336,529,170)
Cum. Net (Cost) or Benefit	(38.0)	(14,622,335)	(87.0)	(68,590,266)	(136.0)	(205,535,265)	(150.5)	(312,323,069)	(165.0)	(371,668,359)	(168.5)	(336,529,170)		

	SUBTOTAL		FY 2019/20		FY 2020/2021		FY 2021/22		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
EXISTING SYSTEM										
Total IT Costs	297.0	491,736,645	49.5	81,548,859	49.5	81,548,859	49.5	81,548,859	445.5	736,383,222
Total Program Costs	78.0	513,652,311	13.0	85,608,719	13.0	85,608,719	13.0	85,608,719	117.0	770,478,467
Total Existing System Costs	375.0	1,005,388,956	62.5	167,157,578	62.5	167,157,578	62.5	167,157,578	562.5	1,506,861,689
PROPOSED ALTERNATIVE	New System Buy/Build Approach									
Total Project Costs									242.5	392,740,024
Total Cont. Exist. Costs									250.9	854,237,006
Total Alternative Costs									493.4	1,246,977,030
COST SAVINGS/AVOIDANCES									(118.4)	(241,588,074)
Increased Revenues										
Net (Cost) or Benefit									(118.4)	(241,588,074)
Cum. Net (Cost) or Benefit									(118.4)	(241,588,074)
ALTERNATIVE #1	CWS/CMS Upgrade									
Total Project Costs	301.0	544,758,608	64.0	88,679,764	50.0	68,581,645			415.0	702,020,017
Total Cont. Exist. Costs	276.0	844,987,542	16.0	85,947,310	16.0	85,947,310			308.0	1,016,882,162
Total Alternative Costs	577.0	1,389,746,150	80.0	174,627,074	66.0	154,528,955			723.0	1,718,902,179
COST SAVINGS/AVOIDANCES	(202.0)	(384,357,194)	(17.5)	(7,469,496)	(3.5)	12,628,623			(160.5)	(212,040,490)
Increased Revenues		0		0		0				0
Net (Cost) or Benefit	(202.0)	(384,357,194)	(17.5)	(7,469,496)	(3.5)	12,628,623			(160.5)	(212,040,490)
Cum. Net (Cost) or Benefit	(202.0)	(384,357,194)	(219.5)	(391,826,690)	(223.0)	(379,198,067)			(160.5)	(212,040,490)
ALTERNATIVE #2	Re-Start CWS/Web									
Total Project Costs	303.0	549,914,336	63.0	82,763,429	63.0	62,482,295	50.0	53,967,805	479.0	749,127,866
Total Cont. Exist. Costs	325.5	936,226,371	13.0	85,608,719	16.0	85,947,310	16.0	85,947,310	370.5	1,193,729,709
Total Alternative Costs	628.5	1,486,140,708	76.0	168,372,148	79.0	148,429,604	66.0	139,915,115	849.5	1,942,857,575
COST SAVINGS/AVOIDANCES	(253.5)	(480,751,751)	(13.5)	(1,214,570)	(16.5)	18,727,973	(3.5)	27,242,463	(287.0)	(435,995,886)
Increased Revenues		0		0		0		0		0
Net (Cost) or Benefit	(253.5)	(480,751,751)	(13.5)	(1,214,570)	(16.5)	18,727,973	(3.5)	27,242,463	(287.0)	(435,995,886)
Cum. Net (Cost) or Benefit	(253.5)	(480,751,751)	(267.0)	(481,966,322)	(283.5)	(463,238,349)	(287.0)	(435,995,886)	(287.0)	(435,995,886)
ALTERNATIVE #3	New System Custom Approach									
Total Project Costs									314.0	578,940,197
Total Cont. Exist. Costs									229.5	762,977,929
Total Alternative Costs									543.5	1,341,918,127
COST SAVINGS/AVOIDANCES									(168.5)	(336,529,170)
Increased Revenues										
Net (Cost) or Benefit									(168.5)	(336,529,170)
Cum. Net (Cost) or Benefit									(168.5)	(336,529,170)

PROJECT FUNDING PLAN

Department: California Department of Social Services

All Costs to be in whole (unrounded) dollars

Date Prepared: 10/1/12

Project: Child Welfare Services New System

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		SUBTOTALS	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
TOTAL PROJECT COSTS	31.0	10,302,046	33.0	33,649,404	42.0	128,554,092	52.5	121,933,149	44.0	74,431,899	40.0	23,869,434	242.5	392,740,024
RESOURCES TO BE REDIRECTED														
Staff	13.0	1,557,153	13.0	1,557,153	13.0	1,557,153	13.0	1,557,153	3.3	389,288	0.0	0	55.3	6,617,898
Funds:														
Existing System		1,458,270		1,458,270		1,458,270		1,458,270		364,568		0		6,197,649
Other Fund Sources		0		0		0		0		0		0		0
TOTAL REDIRECTED RESOURCES	13.0	3,015,423	13.0	3,015,423	13.0	3,015,423	13.0	3,015,423	3.3	753,856	0.0	0	55.3	12,815,548
ADDITIONAL PROJECT FUNDING NEEDED														
One-Time Project Costs	18.0	7,286,623	20.0	30,633,981	29.0	125,538,669	39.5	118,917,726	10.8	55,899,184	0.0	0	117.3	338,276,183
Continuing Project Costs	0.0	0	0.0	0	0.0	0	0.0	0	30.0	17,778,859	40.0	23,869,434	70.0	41,648,293
TOTAL ADDITIONAL PROJECT FUNDS NEEDED BY FISCAL YEAR	18.0	7,286,623	20.0	30,633,981	29.0	125,538,669	39.5	118,917,726	40.8	73,678,043	40.0	23,869,434	187.3	379,924,476
TOTAL PROJECT FUNDING	31.0	10,302,046	33.0	33,649,404	42.0	128,554,092	52.5	121,933,149	44.0	74,431,899	40.0	23,869,434	242.5	392,740,024
Difference: Funding - Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Total Estimated Cost Savings	(31.0)	(10,302,046)	(33.0)	(33,649,404)	(42.0)	(128,554,092)	(52.5)	(121,933,149)	5.5	8,806,930	9.5	60,293,151	(143.5)	(225,338,610)

FUNDING SOURCE*														
General Fund	50%	5,151,023	50%	16,824,702	50%	64,277,046	50%	60,966,574	50%	37,215,949	50%	11,934,717	50%	196,370,012
Federal Fund	50%	5,151,023	50%	16,824,702	50%	64,277,046	50%	60,966,574	50%	37,215,949	50%	11,934,717	50%	196,370,012
Special Fund	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Reimbursement	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
TOTAL FUNDING	100%	10,302,046	100%	33,649,404	100%	128,554,092	100%	121,933,149	100%	74,431,899	100%	23,869,434	100%	392,740,024

*Type: If applicable, for each funding source, beginning on row 29, describe what type of funding is included, such as local assistance or grant funding, the date the funding is to become available, and the duration of the funding.

Date Prepared: 10/1/12

Cost Savings	(31.0)	(10,302,046)	(2.0)	(23,347,358)	(9.0)	(94,904,688)	(10.5)	6,620,943	58.0	130,740,079	4.0	51,486,221
Increased Program Revenues		0		0		0		0		0		0